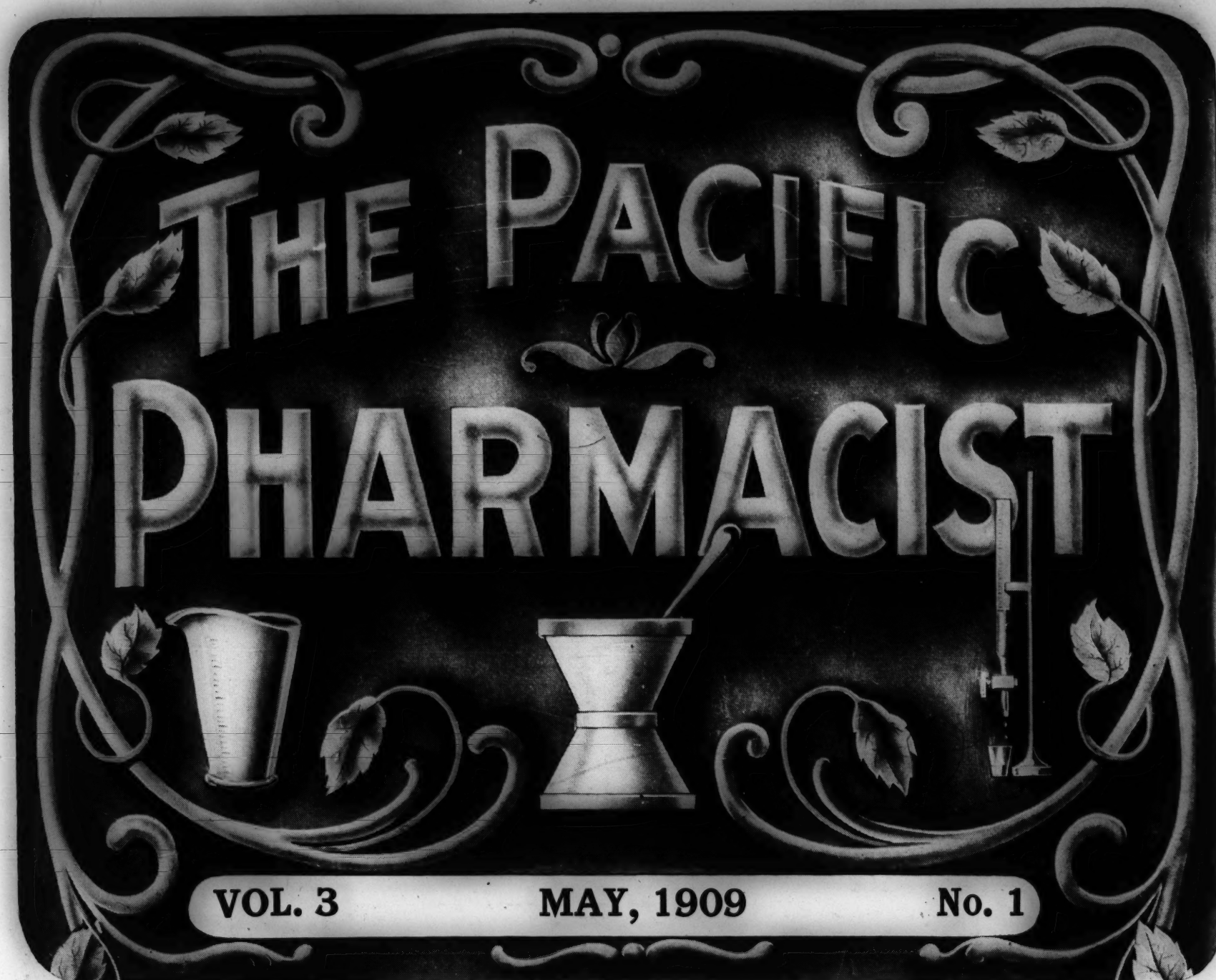


California Pharmaceutical Association, Los Angeles,  
August 13, 1909

American Pharmaceutical Association, August 16 to 20, 1909

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OFFICIAL ORGAN OF THE CALIFORNIA PHARMACEUTICAL ASSOCIATION

Price 15 Cents

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\$1.50 Per Year



# **Tuberculin**

## ***For Human Use***

If you have any call for Tuberculin for human use we are in a position to supply you with what you want. If you are not familiar with the various Tuberculins write us, we can give you such information as you may want. We are always at your service. When you want biologics of any kind specify Cutter's and get the kind that gives satisfaction and pays the best profit.

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Cutter Laboratory**  
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**Here is a Picture** *of the best Peroxide Cream*



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Druggists who continually re-order know why.

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QUALITY  
APPEARANCE  
PRICE

**\$7.50**  
FOR THIRTEEN BOTTLES

**LANGLEY & MICHAELS CO.**  
SAN FRANCISCO



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May, 1909

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Liquid Peptonoids  
 Dry Peptonoids Soluble  
 Liquid Peptonoids cum Creosote  
 Cascara-Peptonoids  
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Preparations of merit, marketed only through the drug trade under conditions which fully protect the druggist, and which therefore should receive his hearty support.

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— Sole Manufacturer of —

## Y. & S. LICORICE

The Old-fashioned Remedy for Coughs and Colds

Also the Celebrated  
**Scudder  
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brands**

Stick Licorice  
Powd. Extracts  
and Powd. Root  
in convenient packages for  
the trade



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Wafers**  
(In 5c bags)

**Lozenges,  
Etc., Etc.**

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by all Wholesale Druggists**

Advertising matter furnished to Retail Druggists  
for Counter and Window Display

Coast Trade Supplied by our San Francisco Agents

# W. M. DuVal & Co.

Santa Marina Building

San Francisco, Cal.



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**PROTONUCLEIN (Tablets, Powder and Ointment)***(Proto-et Nucleo-plasma, R. & C.)*

Primary substances of the cells of the body, containing the true Nucleins.

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For Rheumatism and Gouty Diathesis.

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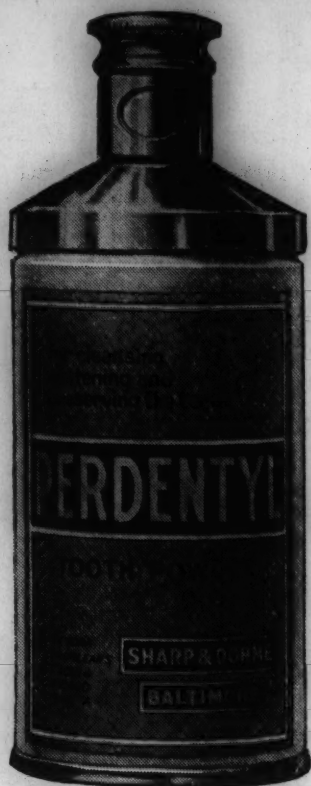
A colorless, non-poisonous liquid antiseptic.



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*A "new idea" Tooth Powder*

An oxygen liberating antiseptic

*Product—A dental delight*

*Package—A "self seller"*

A creditable and profitable product that will please  
your particular patrons

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NEW ORLEANS

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is that feature of every well-regulated pharmacy which should be brought to the highest degree of efficiency. "M. C. W." chemicals have long been preferred by critical dispensers, which fact we regard as being a special recognition of their high standard of excellence. No pharmacist can offer physicians better evidence as to the careful equipment of his dispensing department than to carry a full line of "M. C. W." chemicals.

## Mallinckrodt Chemical Works

ST. LOUIS

NEW YORK



# THE UNITED STATES DISPENSATORY

## SEE THE DOUBLE COLUMN?

be required pure, it should be dissolved in the granulated state, in official alcohol, and the solution evaporated to a syrupy consistence and then set aside to crystallize. The calcium hypophosphite may be prepared by a formula given under the head of *Calcii Hypophosphis*.

**Properties.**—Potassium hypophosphite, according to the U. S. Pharmacopœia, is in "white, opaque, hexagonal plates or masses,

or a granular powder, with a pungent, saline taste, soluble in about 0.5 part of alcohol at 25° boiling water, insoluble in alcohol; in solution, it gives a dry test-tube reaction, and then a bright yellow color in 20) is neutral to litmus paper, and yields a white, crystalline precipitate, which rapidly turns brown or black, owing to the separation of

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19th EDITION**

**Food and Drugs Act**

with

**Most Recent Decisions**

**COMPLETE**

luted sulphuric acid yields, with silver nitrate T.S., a white precipitate, which rapidly turns brown or black, owing to the separation of

certain *scrofulous* affections of children, especially those connected with a disordered condition of the bones.

**Dose,** ten to thirty grains (0.65 to 2.0 Gm.).

**Off. Prep.**—*Acidum Hydriodicum Dilutum*, U. S.; *Emulsum Olei Morrhue cum Hypophosphitibus*, U. S.; *Syrupus Hypophosphitum*, U. S.; *Syrupus Hypophosphitum Compositus*, U. S.

**POTASSII IODIDUM. U. S., Br.**

POTASSIUM IODIDE

(po-tās'si-i i-ōd'i-dūm)

KI = 164.76

"It should contain not less than 99 percent. of pure Potassium Iodide, and should be kept in well-stoppered bottles." U. S. "Potassium Iodide, KI, may be prepared in the same manner as Potassium Bromide, iodine being used in place of bromine." Br.

Iodide of Potassium; *Potassii Hydriodas*; *Kali Hydriodicum*; *Ioduretum Potassicum*, s. *Kalicum*; *Iodure de Potassium*, *Fr. Cod.*; *Kallium Jodatum*, *P. G.*; *Kallumjodid*, *Jodkalium*, *G.*; *Joduro di potassio*, *It.*; *Yoduro potasico*, *Sp.*

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PUBLISHERS **J. B. LIPPINCOTT COMPANY** PHILADELPHIA

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Manufacturers of all kinds of  
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Bottles

**BOTTLES**

Importers of  
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Powder Boxes

Exclusive Pacific Coast Agents for

Armstrong Cork Co.'s Celebrated Standard, Circle A, Circle B and California  
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Trade-Mark

Registered in U. S. Patent Office  
In Use Seventeen Years

This Trade-Mark is the Property of

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New York



# **LUDE N'S** **MENTHOL** **COUGH-DROPS** **GIVE INSTANT RELIEF**

**Profitable for the Job-  
 ber and the Retailer**

**50 SAMPLES attractively  
 displayed given with each  
 box FREE.**

Sold by the wholesale drug trade throughout the  
 United States

**W. H. Luden, Maker      Reading, Pa.**

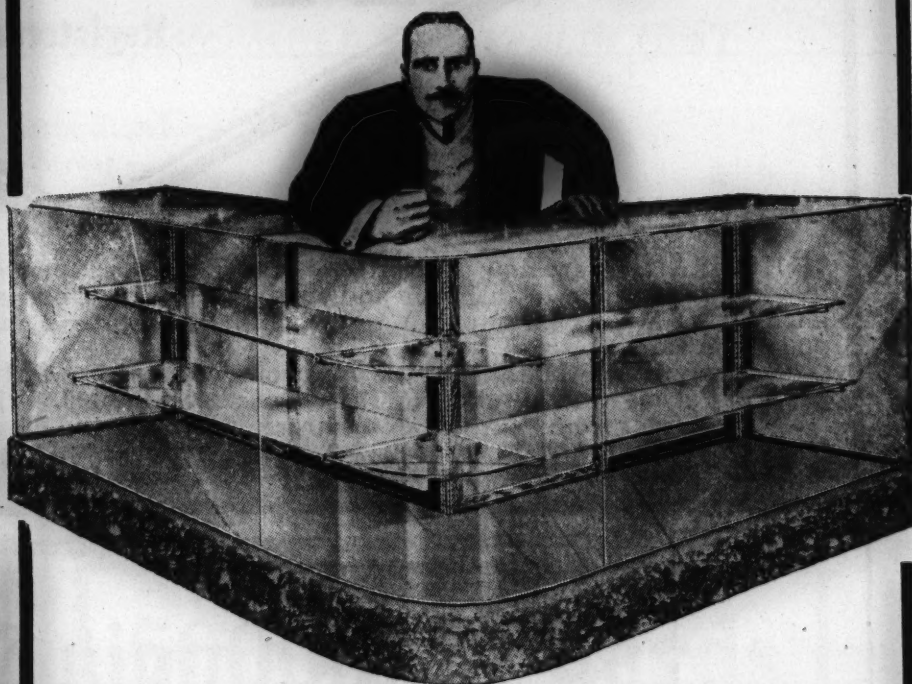
## **A peep into our Letter Files**

Here are two out of hundreds of un-  
 solicited letters, taken at random from  
 our files:

Bay City, Mich., Aug. 28, '05.

"We herewith enclose check  
 for cases as agreed. The cases  
 are very satisfactory indeed and  
 we are delighted with them. We  
 have every reason to believe  
 that they will be a profitable  
 investment. You have certainly  
 filled your part of the contract  
 in a faultless manner and we  
 appreciate it. You can refer any  
 intending purchasers to us at  
 any time you choose.

**"ROMER, LOVELL CO."**



Saugatuck, Mich., Feb. 9, '09.

"Please find enclosed check in  
 payment of fixtures just in-  
 stalled. I wish to say that in  
 appearance, quality and finish  
 you have done more than con-  
 tract called for. It is a pleasure  
 to show my customers the fine  
 points of the fixtures and how  
 well they are made.

**" CHARLES W. PARRISH."**

(TRADE-MARK). This mark is on  
 every case we make. It stands for high  
 quality, fair price and a square deal.  
 When you buy show cases see that this  
 mark is on them. Send today for catalog  
 illustrating our entire line.

**Wilmarth**  
 THE CASE WITH A CONSCIENCE

**Wilmarth Show Case Co.**

**944 JEFFERSON AVE.  
 Grand Rapids, Mich.**

732 Broadway, New York.  
 233-35 E. Jackson Bldv., Chicago, Ill.  
 803 Washington Ave., St. Louis, Mo.  
 Potter Fixtures Co., 515 Market St.,  
 San Francisco, Cal. Sales agents for  
 California, Nevada, Arizona, New Mexico.

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use only

**Grasselli Chemical Co's  
 C. P. Acids**

AND

**Greiner & Friedrichs'**

TRADE  MARK

**Resistance Glassware**

FOR SALE ONLY BY

**Justinian Caire Company**  
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Chemists' and Assayers' Apparatus  
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**Wide-Awake Doctors****DEMAND****Hyoscine, Morphine  
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**T**HOUSANDS are now using Abbott's H-M-C Hypodermic Tablets for surgical and obstetrical anesthesia, as well as for general analgesic and anodyne effect, with greatest success and satisfaction. As an hypnotic and anodyne H-M-C is far superior to morphine, or atropine and morphine, under all conditions. Be sure that you are in stock.

Imitation Preparations of "Hyoscine, Morphine and Cactin Comp." (Abbott) are Dangerous  
Style of Packages and Prices: No. 1, Tube of 25, 40c; Per 100, bulk, \$1.50; No. 2, (Half strength): 25, 30c; 100 bulk, \$1.10  
Order from your jobber or direct. Formula and literature with every package or on request.

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## "Antikamnia & Codeine" TABLETS

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### VEST-POCKET-BOXES

**RETAIL PRICE,****25c**

Same Size and Style as  
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Vest-Pocket-Box

**CONVENIENT  
for POCKET  
or PURSE**

Fac-Simile Antikamnia & Codeine Vest-Pocket-Box

**May Now be Obtained from all Jobbers**

**\$1.75 PER DOZEN**

One Gross Lots 5 Per Cent Discount

If Your Jobber Cannot Supply You  
Order Direct From

**The Antikamnia Chemical Company**

ST. LOUIS, MO.





TRADE MARK 'TABLOID' BRAND

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**The sale of articles of other manufacture when any of these brands are specified in ordering is an infringement and unlawful.**

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ST. LOUIS, MO.—Meyer Bros. Drug Co., Fourth and Clark Streets

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Our list of customers is growing rapidly this year. We should like to add your name if it is not already there.

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Detroit, Mich., U. S. A.

Windsor, Canada London, Eng.  
New York City.

## 5000 Post Cards



**HIGH GRADE**  
Well Assorted

Including Birthday and Imported Embossed Flower Cards, and this

**WONDERFUL**  
**Tower**  
**Stand**  
**FOR \$16.00**

The Stand is 7 feet high and occupies only 30 inches square of floor space. Shows 388 different cards. It will sell more Post Cards in a day than you sold before in a week.

If you wish to increase your post card business you must have a Tower Stand.

**Shipped Knocked Down**

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**THE CUT-RATE POST CARD HOUSE**  
CHICAGO, ILL.



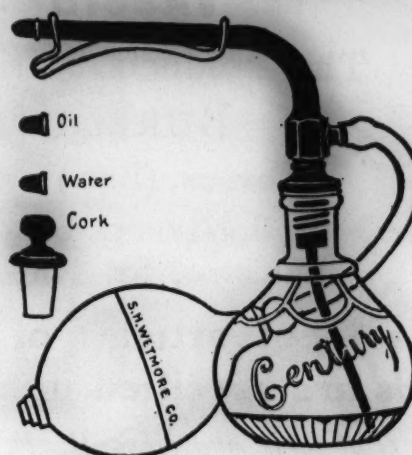
## The "Fairchild" Products FOR PERMANENCE

The "Fairchild" products are not only permanent in the sense that they "keep well," but notably with reference to their status in practical therapeutics.

They have been in use since 1879, beginning with Fairchild's Essence of Pepsin and Pepsin in Scales, and each has an assured place in the armamentarium of the physician, as determined by its principles and properties.

**Fairchild Bros. & Foster**  
NEW YORK

## Keep an Assortment of Century Atomizers On Your Shelves



THEY ARE WELL ADVERTISED.  
THEY PAY A GOOD PROFIT.  
DOCTORS PRESCRIBE THEM.  
WE GUARANTEE THEM

**THE S. H. WETMORE CO.**  
New York

## Fellows' Syrup

### Important Notice

¶ This is to remind you that most sales of **FELLOWS' SYRUP OF HYPOPHOSPHITES** are made on Physicians' prescriptions, in which case the profit to the retail druggist is nearly 100%.

¶ This means that the Physician sends you a desirable customer; and the least you can do is to treat him fairly, and supply the preparation prescribed, Fellows' Syrup.

¶ Members of the retail drug trade are warned against buying or selling colorable imitations of the well-known yellow-wrapped package of Fellows' Syrup. The highest Courts have decided that such an act is an infringement of the Trade-Mark Law, and makes the offender liable to a suit for damages.

## Borden's Malted Milk

Quality Right  
Price Right

**\$4      \$8      \$33**

5% off in \$12 lots  
10% off in \$48 lots

**Why Pay More?**



# THE Pacific Pharmacist

Official Organ of the California Pharmaceutical Association

AN INDEPENDENT JOURNAL DEVOTED TO SCIENTIFIC PHARMACY AND  
THE INTERESTS OF THE DRUG TRADE

Entered as second-class matter September 30, 1907, at the postoffice at San Francisco, California, under the Act of Congress of March 3, 1879.

Vol. 3

MAY, 1909

No. 1

Published on the Fifteenth Day of Each Month  
by THE GALEN PUBLISHING COMPANY  
728 Pacific Bldg., San Francisco, California

W. M. SEARBY . . . *Managing Editor*

Address all communications and make all checks and money orders payable to THE PACIFIC PHARMACIST.

Communications on questions pertaining to Pharmacy and the Drug Business are solicited. The name of the writer should accompany every article, not necessarily for publication, but as a guarantee of good faith.

No attention will be paid to anonymous articles. Stamps should be enclosed if rejected communications are desired returned.

## Editorial Notes

### STATE PHARMACEUTICAL ASSOCIATION

The by-laws of the California Pharmaceutical Association require that the annual meeting shall be held on the third Tuesday in May. But as a much larger attendance can be had by meeting in August, just before the meeting of the A. Ph. A., it has been understood that those who assemble in May will adjourn to meet at Los Angeles on August 13th. Accordingly the Board of Trustees have summoned a meeting to be held at the California College of Pharmacy, at the Affiliated Colleges, San Francisco, on May 18th, when an adjournment will probably be voted, as officers have not the power to perform this act.

Make your plans for taking a ten days' vacation in August, so that you can attend the California and American Pharmaceutical Association meetings. Do it now!

### HOW TO GET TO LOS ANGELES

The American Druggist, whose editor, Caswell A. Mayo, is chairman of the committee on transportation, publishes in its last issue detailed information concerning the routes of travel to and from Eastern points and Los Angeles, together with the cost. We reprint the item entire on another page, in the hope that our readers will send the information to their friends in the East and encourage them to come.

### RAILROAD RATES TO CALIFORNIA

The committee on transportation announces that a rate has been secured of a fare and a third for the round trip between Los Angeles and all points on the Southern Pacific, the Santa Fe and the Salt Lake route. From Chicago the round trip rate will be from \$62 to \$72.50, and from St. Louis from \$57.50 to \$67.50, with stop over privileges, both going and return-



ing. The regular summer excursion rate of one and a half fares must be paid by travelers from the East between eastern points and either Chicago or St. Louis, the established differentials being recognized and one and a half differential being added to the price of tickets over the higher priced roads. This means that a round trip ticket from New York to Los Angeles, good on any direct route west of Chicago and on the so-called "differential roads," will cost \$102.50. Over the New York Central and Pennsylvania roads the ticket will cost \$107.25. These tickets will be on sale August 6 and will be good for return up to October 31. The sleeping car fare is \$19 for a lower berth should the party go straight through. If the sleeper is detained at any point for sightseeing an additional charge will be made.

**THE CHOICE OF ROUTES** The journey to Los Angeles offers so wide a variety of attractive routes that it would be impossible to plan any one route which would meet with the approval of all. The question of what route shall be taken will involve also the amount of time to be devoted to the journey. Some of the members of the association will avail themselves of this opportunity for making an extended vacation, and many of these no doubt will be glad to join with Professor Charles Caspari, Jr., of Baltimore, who expects to leave that city on July 25, spend some days in St. Louis, going thence to Colorado Springs for a few days, thence to Denver, Salt Lake, San Francisco, and through the Yosemite Valley to Los Angeles. Returning, Professor Caspari's party will come by the Santa Fe route, visiting the Grand Canyon of the Colorado. Stop over privileges will be granted on the excursion ticket at all points named. The committee on transportation has under advisement a direct trip for such as

may be pressed for time. These will probably leave Chicago in time to arrive at Los Angeles on the evening of Sunday, August 15. The following route will probably be recommended going, leaving members to decide for themselves as to the route returning: Chicago, Omaha, Denver, with a stop of a few hours to meet the Denver druggists, possibly at a dinner; Colorado Springs, with a lay over of a few hours, giving time for a hurried ride through the Garden of the Gods, but not for the ascent of Pike's Peak, though its base will be visited; through the heart of the Rockies to Salt Lake City, where a stay of four or five hours will permit of a bath in Great Salt Lake, and thence direct to Los Angeles, arriving twenty-four hours later.

**THE RETURN TRIP** This itinerary will appeal to such as are pressed for time, but who still wish to get a glimpse of the natural beauties of the country through which they pass. Members of this party may return via the Santa Fe road, visiting the Grand Canyon of the Colorado, one of the wonders of the world, or by way of the Yosemite Valley, San Francisco, Ogden and the Yellowstone Park, or by way of Seattle, the Northern Pacific and the Yellowstone Park, or by way of Seattle and the Canadian Pacific. The only additional cost involved in returning by way of Yellowstone Park will be the \$55 which it would cost to make the journey through the park. The return by way of Seattle would involve an additional cost of about \$5 in railroad fare over the cost of returning by a direct route. The committee is discussing the details of the routes, and all the members of the committee would be glad to hear expressions of opinion from those who contemplate going as to the choice of routes.—**American Druggist.**



1889 AND 1909 The twenty years that have elapsed since the American Pharmaceutical Association met on the Pacific Coast have witnessed some notable changes in its membership. Looking over the register of the 37th Annual Meeting in San Francisco, June 24 to 29, 1889, the writer sees the names of many veterans in the Association's ranks who have answered the last call. The first entry on the register is M. W. Alexander of St. Louis, president that year. He and his fellow citizen, Dr. Frank L. James, the talented editor of the **National Druggist**, will not be with us. Among the deceased Philadelphians we see the names of Dr. J. M. Maisch and J. H. Zeilin. Among others on the list we note the devoted Albert E. Ebert of Chicago, G. W. Kennedy of Pottsville, Penn., H. M. Whitney of Lawrence, Mass., and P. W. Bedford of New York. The last of the number is Jacob H. Redsecker, of Lebanon, Pa., news of whose death comes to us as we write this item. Among Californians we find the names of Emlen Painter, Dr. S. H. Melvin and wife, John Calvert, John Devine, S. A. McDonnell, I. D. Holden, Adolph Ekman, F. C. Keil, S. Oberdeener, F. T. Maynard, D. M. Gove, J. G. Tanner, Emery P. Gates and James Topley.

But the number of those living and active in pharmacy exceeds the dead, and not a few of them will surely be with us this year. In this category we find H. M. Whelpley of St. Louis, Mr. and Mrs. Charles E. Dohme of Baltimore, C. S. N. Hallberg of Chicago, A. B. Stevens of Ann Arbor, F. A. Druehl of Salt Lake City, W. L. De-woody of Pine Bluff, Ark., E. W. Runyon and T. F. Main of New York, Leo Eliel of South Bend, Ind., and L. C. Hopp of Cleveland, O. As for Californians and others from the Pacific States, they are too numerous to mention.

Besides the old guard named above, there are many who could not come last time but are able to come now, men who are seldom absent from these annual meetings. But the hopes of the world are bound up in its young men, and of these there is a small army who are forging to the front as their better education and superior technical training has developed them into strong men. Some of these will be here, and we want the young pharmacists of the Pacific to meet these progressive men, imitate their patient industry and catch their fire. Oh! we shall have a good time!

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**LOOKING AHEAD** A Tercentennial Celebration is planned for the purpose of celebrating the three hundredth anniversary of the Landing of the Pilgrims and the Founding of New England, by holding a World's Exposition in Boston in 1920.

These New Englanders are taking time by the forelock. They evidently intend to have a phenomenal exposition. They are taking eleven years to prepare for a great event, and the fact that they take so long for this purpose will go far to insure making the celebration a grand success.

Our beloved Joseph Leconte once said that he did not consider that he ever did anything worth while until he was fifty-seven years old, and he left a name behind him that any scientist might envy. But what was he doing these fifty-seven years? Just getting ready to do good work, work that would abide long after his life was ended. For forty years he had been preparing for the great things he afterwards accomplished.

And yet we have met young drug clerks who expected by some magical metempsychosis to be transmuted into capable pharmacists in the course of a few months, as if the requisite knowl-



edge of botany, chemistry and allied sciences could be acquired as readily as one can memorize a coon song!

**THE STRONGHOLD OF THE NOSTRUM EVIL** That outspoken writer, William J. Robinson, Ph. G., M. D., has a way of dressing down doctors and druggists with a charming impartiality. He tells unpleasant truths with terrible bluntness. He never sugar-coats his pills. He persists in calling a spade a spade. He is editor and publisher of the **Medico-Pharmaceutical Critic and Guide**, and seems to get a lot of fun out of the job. In his last issue he attacks "that good old fake, Radam's Microbe Killer," which it seems is still alive, though over twenty years ago Professor Wenzell of the California College of Pharmacy showed the absurdity of its pretensions by publishing an analysis of its composition. Soon after this other chemists in the East did the same, but it still lives.

Incidentally to the vitality of such compounds, Dr. Robinson asks "who is instrumental in spreading, giving prestige to and in popularizing such nostrums?" and his answer on another page is interesting reading. His conclusion that "the greatest menace to professional pharmacy today is the corporation drug store" is doubtless correct, both in England and America, notwithstanding the fact that there are corporation drug stores of whom this cannot be said.

**PECULIAR QUALIFICATIONS OF BRITISH PHARMACISTS**

Except to persons specially interested, the advertising columns of a newspaper or journal are not usually entertaining reading, especially those headed "Situations wanted" and "Situations open." But we confess to being somewhat amused in glancing over these columns in a recent number

of our valued contemporary, "**The Chemist and Druggist**" of London. Here are a few:

"Qualified assistant wanted; no Sunday duty. Close at 2 o'clock Thursdays." Another closes at 2 o'clock on Saturdays. "State salary required (outdoors)" etc. We naturally ask what kind of a pharmacy is it that needs a qualified (i. e. registered) assistant and yet can close its doors at 2 o'clock every Thursday or Saturday. The reference to "Salary required (outdoors)" shows that the custom still prevails in England of having the help in many cases board as well as sleep on the premises, the residence and drug store being often over the store. Another advertisement reads: "Wanted, qualified assistant for Locum work"—a **locum tenens** being what we call a relief clerk, or one taking charge while the proprietor takes a vacation. But here is a man who wants an "Unqualified Manager of Drug Stores." There is no need to advertise for such people here, for we have plenty of unqualified men who will undertake to manage anything, but in the case cited we suppose that some one who need not be a pharmacist is wanted to manage a number of drug stores that are not pharmacies, but stores where proprietaries and druggists' sundries are sold by unregistered men. Another advertises "for qualified manager for country branch, energetic, smart and reliable; extractor and photographic preferred." How many of our American "qualified" pharmacists would prove to be energetic in pulling teeth and smart and reliable in photographic work?

But our British cousins appear to depend a good deal upon good looks. One wants a "gentlemanly assistant for high-class dispensing business, outdoors. Give age, height, etc." Evidently tall men are at a premium, for several advertise their height, and one



says he is "21 years of age and tall," and another says "is tall, good appearance and address"; and still another, "Minor; tall; age 35," and the request by employers for photo is frequent. In addition to good looks, the British drug clerk must have good habits. Several seeking positions advertise that they are "abstainers," and some employers stipulate that only abstainers need apply.

The qualifications of these "qualified" men seem to be quite varied, for in addition to the pharmaceutical attainments, they are expected to have a knowledge of "Optics and Photography," "of Salesmanship," "Dispensing, Prescribing and Extracting," while one lady advertises that she is a "Dispenser and Bookkeeper."

The scientific part of the drug business is almost the same in England as it is in this country. Yet these advertisements reveal marked differences in the daily routine of the two. Across the water it seems to be quite common for the druggist to continue one or more of these as side lines: Optometry, photography, tooth extraction and counter prescribing, and the picture presented to the American pharmacist is not alluring.

#### STATE PHARMACY LAWS

The Amended Pharmacy bill having been signed by the Governor on April 21st, will go into effect June 20th, sixty days after it was signed. While the amendments deal largely with the sale of poisons and habit-forming drugs, it also modifies the sections relating to twenty-year registration, general dealers and the giving of copies of prescriptions, and enacts a provision dealing with habitual intemperance, etc., on the part of the pharmacist. These changes are fully set forth in *The Pacific Pharmacist* for April, 1909, pages 487 to 489.

The next meeting of the California

State Board of Pharmacy will be in Los Angeles during the week commencing July 19th, and in San Francisco July 26th, 1909.

#### NEW MEMBERS OF THE BOARD OF PHARMACY

We are informed that Governor Gillett has appointed the following gentlemen to serve as members of the Board of Pharmacy for the next four years:

E. T. Off, Los Angeles, to succeed himself.

H. O. Buker, Fresno, to succeed himself.

E. J. Molony, San Francisco, to succeed himself.

Chas. B. Whilden, to succeed A. L. Leber.

The other three members will not be appointed for about a month.

#### NEVADA STATE BOARD OF PHARMACY

At the semi-annual meeting of the Nevada State Board of Pharmacy held at Reno, May 5th, Robert L. Prouty of Tonopah was elected secretary to succeed F. J. Steinmetz, who resigned.

Permanent certificates were granted to the following: H. Hoeschler, La Crosse, Wis.; H. Otto, Goldfield, Nev.; Chas. S. Briggs, Rawhide, Nev.; J. Robertson, Goldfield, Nev.; Ed. L. Forsyth, Rawhide, Nev.; Hans F. Otti, Montpelier, Idaho; James H. Ketchersid, Hope, Kansas; Lyman A. Kepner, Kingston, Mo.; Francis E. Carpenter, Valparaiso, Ind.; F. Milz, Crisco, Ia.; Fred C. Fergen, Crisco, Ia.; Wm. Boeling, Virginia City, Nev.; Warren M. Cave, American Fork, Utah; Albert B. Hosey, Leadville, Colo.; and Merton Bier, Carson City, Nev.

Los Angeles has first-class and family hotels and lodging houses, advantageously located throughout the city, and can care for 60,000 guests.



## Original Communications

### GETTING READY FOR SUMMER PEROXIDE COLD CREAM

By H. D. Morgan, Ph. C.

Now's the time to think of what's on for summer. Well, we're going to need some new cold cream this year. Yes, and let's do away with the old one of last year. True, it was a good cream, but today all want the new famed "Peroxide Cream."

Peroxide of hydrogen is a fairly good bleacher and lends great weight to a salesman's argument when he speaks of it as an antiseptic. All this may be true, yet no special argument can be used for the continued use of this same "wonderful" (?) antiseptic. It has **some** good points, but is far over-rated as an antiseptic and oxidizer. It does not penetrate—merely bleaches the extreme surface, and that only temporarily. The continued use has a tendency to dry the skin, and will eventually destroy any hair there may be.

The various Peroxide Creams on the market do not contain any great amount of  $H_2O_2$  (usually more  $H_2O$ ).

Below is a formula that will give a fairly satisfactory cream. It will take some practice to make a good "greaseless" cream. But as long as the trade demands the goods and you have to keep 'em, don't be afraid to say—

"Yes'm, this **is** the newest of the summer creams, made by an expert, combining art, medicine and science. You will find this a daintily scented, snowy white, greaseless cream, of antiseptic properties. When used for massage it has a tendency to remove any marks, discolorations or wrinkles there may be upon the skin. The liberation of the harmless bleacher, Peroxide of Hydrogen, will give a whiteness and velvety softness to the skin,

and remove tan and sunburn in a manner not obtained by the use of other ordinary harmless bleachers. The ingredients come within the ruling of the Department, and are of a quality that would be harmless to eat. You will make no mistake in the purchase of this cream—you will find this all we claim for it. Twenty-five cents, please."

#### Peroxide Cream

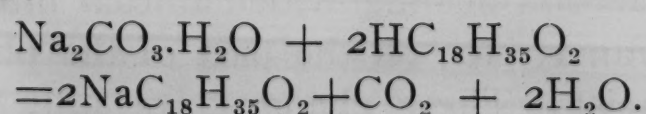
Quince seed .....oz  $\frac{1}{2}$   
Boiling water .....oz 12  
M. et ft mucilage. Strain till clear.  
Heat and add till thoroughly mixed.  
Stearic acid, previously melted, oz 16  
Add slowly water oz. 20, in which  
has been dissolved:  
Borax .....dram  $1\frac{1}{2}$   
Sodium Carbonate .....drams 4  
When cold add  
Water .....oz. 32  
Peroxide of hydrogen.....oz. 4  
Alcohol .....oz. 1  
Perfume .....q. s.  
Misce S. A.

The Chemist and Druggist has the following under the caption

#### MODERN SKIN CREAMS

##### Sodium-stearate Type

The basis of this type is sodium stearate, prepared by the interaction of stearic acid and sodium carbonate. Sodium stearate is the main constituent of ordinary soap, but the advantage of making the sodium stearate extemporaneously is that a more finely divided mass is obtained by the action of the carbon dioxide. The reaction is as follows:



Stearic acid, or cetyl acetic acid, occurs as a glyceride in most hard fats, where it is associated with similar es-



ters of palmitic and oleic acids. The glyceride of stearic acid is known as stearin, but in commerce the term "stearin" is applied to stearic acid, which is used on a large scale in the manufacture of candles. Stearin obtained from tallow by removal of the fluid olein by pressure was the form first employed in candle-making, but the more easily prepared stearic acid was afterwards introduced and answered the purpose better than stearin. Commercial stearic acid is made by saponifying suet, tallow, or shea butter with lime and then treating with sulphuric acid to liberate the fatty acids. The oleic acid is then removed by pressure. There are many modifications of this method. In one well-known process the stearic acid is recovered by distillation. Stearic acid comprises 46 per cent of the fatty acids of tallow. The "chemically-pure" acid is crystallized from alcohol and occurs in lustrous tables. Pure stearic acid is official in the United States Pharmacopoeia, where it is employed in the manufacture of glycerin suppositories. It is, in fact, this process which has been adapted as the basis of the sodium-stearate skin-creams. Although stearic acid is used in these creams, stearin, if obtainable, can be employed. Glycerin is always added in the process of making the creams, so that the small additional amount of liberated glycerin is scarcely a disadvantage.

Sodium carbonate mono-hydrate is the proper form of sodium carbonate to employ. It is known as crystal soda, "Crescent" brand, and is largely used as the basis of bath-salts and water-softeners. The sodium carbonate which is sold for photographic purposes contains ten molecules of water, and as the firmness of the skin-cream depends upon the amount of water present, this form should not be employed. If crystal soda is not readily obtainable, exsiccated sodium carbonate of the Brit-

ish Pharmacopoeia, which is nearly free from water, may be substituted. Potassium stearate is preferred by some pharmacists, but it is more deliquescent and less stable than the sodium salt. It is prepared by the use of potassium carbonate.

A disadvantage of this type of skin-cream is the readiness with which the mass "falls," or shrinks on keeping. To overcome this, tragacanth, agar-agar, or a similar mucilaginous body is used in one method, the other way being to add a small amount of grease, such as oil of theobroma, liquid paraffin, almond oil, or wool-fat, the idea in both cases being to coat the sodium-stearate particles and keep them from contact with the air. A trace of castor oil is sometimes added to this product, but in this case the intention is to obtain a pearly appearance. Hydrogen peroxide as an ingredient is used for its bleaching effect on the skin. In its place other peroxides and perborates could be employed.

#### Chicago Cream

|                         |         |
|-------------------------|---------|
| Stearic acid .....      | 240 gr. |
| Sodium carbonate .....  | 155 gr. |
| Powdered borax .....    | 30 gr.  |
| Glycerin .....          | 1 oz.   |
| Oil of ylang ylang..... | 20 min. |
| Heliotropin .....       | 5 gr.   |
| Otto of rose .....      | 5 min.  |
| Alcohol .....           | 1 oz.   |
| Water .....             | 8 oz.   |

Place the stearic acid, sodium carbonate, borax, glycerin, and water in a water-bath and heat until effervescence ceases. Remove from the source of heat and stir at intervals until the mixture begins to set. Then add the perfumes dissolved in the alcohol and beat up with an egg-whisk. If the mass is not smooth enough it should be beaten up again on the following day.

#### Hamamelis Cream

|                            |        |
|----------------------------|--------|
| Stearic acid .....         | 2½ oz. |
| Sodium carbonate .....     | 3 dr.  |
| Glycerin .....             | 3 dr.  |
| Solution of hamamelis B.P. | 12 oz. |
| Water to make.....         | 25 oz. |



Place the stearic acid in a water-bath and when it is melted add the sodium carbonate and glycerin dissolved in 2 oz. of hot water. Heat with constant stirring until effervescence ceases, remove from the source of heat, add water to make the product weigh 13 oz., and finally the solution of hamamelis. Stir till smooth, heating a little if necessary, and beat to a foam in a warm mortar.

#### Stanislaus's Skin-Cream

|                            |           |
|----------------------------|-----------|
| Stearic acid .....         | 30 gm.    |
| Oil of theobroma .....     | 5 gm.     |
| Sodium carbonate .....     | 20 gm.    |
| Borax .....                | 5 gm.     |
| Glycerin .....             | 25 c. c.  |
| Terpineol .....            | 2 c. c.   |
| Oil of bitter almonds..... | 1 min.    |
| Otto of rose.....          | 10 min.   |
| Alcohol .....              | 30 c. c.  |
| Water .....                | 400 c. c. |
| Mucilage of tragacanth.... | 100 c. c. |

Place the ingredients, except the perfume and alcohol, in a water-bath and heat until effervescence ceases. Remove from the heat, and when the mixture begins to harden add the perfume dissolved in the alcohol and well mix. Allow it to harden, then warm and beat vigorously until a fluffy cream results.

#### Caldwell's Cream

|                           |        |
|---------------------------|--------|
| Stearic acid .....        | 12 oz. |
| Glycerin .....            | 12 oz. |
| Water .....               | 24 oz. |
| Potassium carbonate ..... | 4 dr.  |
| Borax .....               | 1½ dr. |
| Powdered tragacanth ..... | 4 dr.  |
| Perfume .....             | q. s.  |

Place the glycerin in a water-bath, heat to 150° F., and add the tragacanth previously rubbed with a little alcohol. Next add the stearic acid, continue the heat until the acid is melted, and add the borax and potassium carbonate, dissolved in hot water. Stir until the mass begins to set, and add the perfume.

#### Peroxide Cream

|                          |        |
|--------------------------|--------|
| Stearic acid .....       | 3 oz.  |
| Sodium carbonate .....   | 2½ dr. |
| Anhydrous wool-fat ..... | 4 dr.  |
| Glycerin .....           | 3 oz.  |

|                                     |        |
|-------------------------------------|--------|
| Borax .....                         | 1 dr.  |
| Solution of hydrogen peroxide ..... | 4 dr.  |
| Water .....                         | 16 oz. |
| Perfume .....                       | q. s.  |

The hydrogen peroxide is added when the mass, prepared as in the previous recipe, is setting.

#### Rolling Cream

|                           |        |
|---------------------------|--------|
| Stearic acid .....        | 4 oz.  |
| Glycerin .....            | 4 oz.  |
| Water .....               | 16 oz. |
| Potassium carbonate ..... | 1 dr.  |
| Boric acid .....          | ½ oz.  |
| Casein, soluble .....     | 1 oz.  |
| Powdered tragacanth ..... | 15 gr. |
| China clay .....          | 3 oz.  |
| Carmin solution .....     | q. s.  |
| Perfume .....             | q. s.  |

This is used as a massage cream.

### BACTERIAL VACCINES AND TUBERCULINS

By Albert Schneider

The following was prompted by the recent visit to the Cutter Laboratory, as reported in the April issue of the **Pacific Pharmacist**. Many of the statements are taken from the special circulars of information issued by the Cutter Laboratory and by other similar laboratories. It is a very brief, much condensed summary of the subject, omitting all fanciful theorizations and adhering to the facts as now comprehended by the leaders in the medical profession. Reliable pharmaceutical manufacturing houses do not prepare and market new remedial agents until there is a demand for them, created by the leaders in the medical profession.

The studies of Metchnikoff and Leishman on phagocytosis paved the way for the discoveries of Wright for the Opsonic Method of Treatment of bacterial diseases. Of the means whereby the body tissues are enabled to overcome bacterial invasion, our present knowledge is far from perfect. Metchnikoff holds that the principal part is played by the substances to which he has given the name "stimu-



lins." The presence of these substances in the tissue fluids he has not yet satisfactorily demonstrated, but considers their function to be that of acting upon the phagocytes so as to stimulate them to perform phagocytosis. Wright, on the other hand, has demonstrated beyond doubt the presence in the blood of substances which act upon the infecting bacteria and get them ready for the completion of their destruction by the phagocytes. To these bodies he has given the name "opsonins." That pre-opsonin or opsonins are not formed in the blood is certain. Experimental evidence seems to prove that they are products of muscular or subcutaneous activity. The possible conclusion is that the actual formation of opsonins occurs in the muscle tissues and passes thence to the blood. Wright has demonstrated more or less satisfactorily the presence of opsonin in the blood of animals and humans and by a special technique has measured the relative amount. This measurement is a ratio of the activity of the phagocytes in normal blood and of that in disease, before or after stimulation, determined by the number of bacteria that a single phagocyte will ingest—the so-called "Opsonic Index." This index or ratio is made intelligible by decimal figures which represent the number of bacteria the average phagocyte will take up. It is said that the phagocytes in normal blood will ingest an average of 10 bacteria, represented in the index by the figures 1.0, but in that of disease (chronic) the phagocytes will only take up an average of 3, 6, or other numbers, represented by the figures 0.3, 0.6, etc. After stimulation the phagocytes may take up 15, 25, or other numbers of bacteria represented in the index by the figures 1.5, 2.5, etc.

The taking of the opsonic index of an individual's blood requires considerable delicate technique. In brief, it is performed by mixing together equal vol-

ume quantities (measured in a capillary tube) of blood serum and an emulsion of bacteria and incubating for 15 minutes at 37.5 degrees C. Then making a thin smear of the mixture on a microscopic slide, drying and staining, and counting the number of bacteria enclosed in each white blood corpuscle (50 to 200 cells counted) and striking an average. This average is the index stated by a decimal figure. The index thus obtained indicates the relative phagocytic power of the individual's blood tested, whether below or above the normal.

The opsonic index taken in the various chronic forms of bacterial infections is invariably below normal and shows that the phagocytic power is low, and it seems to prove that the chronicity is due to the abnormal phagocytosis. The injection of several millions of devitalized bacteria of the same kind as causing the infection, causes the formation of the specific opsonin, arouses the phagocytic activity and relieves the chronic condition. The mixture for the injection is a homogeneous suspension of the bacteria in physiologic salt solution with 0.4 per cent of trikresol or lysol. It is heated to 60 degrees C, for an hour to devitalize, and the number of bacteria adjusted to represent a special number of millions in each cubic centimeter. This is termed a bacterial vaccine. The most successful treatment has been with a vaccine made from the individual disease—autogenous or homologous vaccine—but this is not always possible, as in many diseases a culture cannot be obtained, and then resort is made to a stock vaccine—one made from a similar disease in another individual. Owing to the various strains of some bacteria an autogenous vaccine is the only one suitable.

The following bacterial vaccines are now prepared by the Cutter and other manufacturers and are being used:



#### **Gonococcic Vaccine**

A suspension of devitalized **Micrococcus gonorrhoeæ** in a physiologic salt solution with 0.4 per cent of trikresol. Each cc. contains about 50,000,000 microbes. About 10,000,000 microbes represents an average dose, although some recommend as high as 250,000,000 microbe doses. This remedy is of diagnostic value and is reported as being curative in chronic forms of gonorrhoea.

#### **Staphylococcic Vaccine**

A suspension of devitalized Staphylococci in physiologic salt solution with 0.4 per cent trikresol. Each cubic centimeter contains about 500,000,000 cocci, being about an equal number of Staphylococcus Pyogenus Aureus and Staphylococcus Pyogenus Albus, used by hypodermic injection in the treatment of acne, furunculosis, boils, etc., and any Staphylococcic skin infection. This preparation has been used with considerable success, particularly in the treatment of boils.

An autogenous or homologous vaccine is a suspension of devitalized bacteria propagated directly from the disease. The method is to make multiplied cultures of the infecting organisms on solid culture media, remove the surface growths and agitate in sterile physiologic salt solution to a uniform suspension or "emulsion." The bacteria are then counted in comparison with the red corpuscles in an equal volume of normal blood and adjusted to the desired number by dilution. It is devitalized by heating to 60 degrees C. for one hour and then tested for absolute sterility by the usual bacteriologic methods. Material for the cultures must be such as contain the infecting organisms and collected with strict aseptic precautions to prevent contamination with extraneous bacteria. Such material may be blood, pus or secretions.

Most interesting of all is the ex-

planation regarding the manufacture and use of tuberculin and the diagnostic use made of the several preparations of tuberculin. The following preparations are used:

Tuberculin O. T., original or old tuberculin, which is prepared by growing a pure culture of human tubercle bacilli on the surface of 5 per cent glycerin bouillon for six to eight weeks. It is then sterilized in a steam bath at 100 degrees C. for an hour and filtered to remove the bacilli, the filtrate evaporated on a water bath to 1-10 of its volume and again filtered, which then is the tuberculin. The concentration increases the glycerin content from 5 per cent to 50 per cent, which acts as a preservative. The tuberculin is the concentrated culture medium containing the excreted products of the bacilli during life that are not altered by heating.

#### **Tuberculin B. F., or Bouillon Filtrate**

The culture is grown in the same way and for the same length of time as the "old." The bouillon is decanted from the surface culture, 0.4 per cent trikresol added and filtered through a Berkfeld (porcelain) filter to remove all bacilli. Denys claims that the filtrate contains very sensitive immunizing substances which are destroyed by heating, as in the process used for sterilizing and evaporating old tuberculin according to the Koch method.

#### **Tubercle Residue, T. R.**

This is prepared by growing a pure culture of human tubercle bacilli on 5 per cent glycerin bouillon until the growth nearly covers the surface of the bouillon, at which time the bacilli are the most vigorous. These are freed from the culture medium by filtering through a sterile hard paper filter and washing many times with sterile water. The bacilli are dried in a vacuum dessicator in the dark. The dried bacilli are then ground by special machinery, suspended in sterile distilled water and



vigorously centrifuged (4000 revolutions per minute). The opalescent supernatant fluid is drawn off and discarded, the sediment is again dried and reground and again centrifuged. This time the opalescent supernatant fluid is reserved. The process of drying, grinding and centrifuging is kept up until the bacilli at first taken are entirely extinguished or disintegrated and go into solution, and the finely disintegrated cell wall which is insoluble remains in suspension, giving the opalescence to the liquid. The combined supernatant fluids are then standardized, so that each cc. contains 2 mg. of total residue or solid substance upon evaporation. Tuberculin R., or T. R., is a fluid containing the soluble portion of the disintegrated tubercle bacilli together with the suspended minute fragments of the cell wall and containing 20 per cent glycerin with 0.4 per cent of Trikresol. The dose is regulated by the amount of solid substance it contains. It is heated at 60 degrees C. for one hour to insure sterility.

#### **Bacillen Emulsion, B. E.**

This is prepared by the same process as T. R. The tubercle bacilli are removed from the medium, carefully washed with sterile water, dried in vacuum dessicator in the dark, ground by special machinery and centrifuged. The opalescent supernatant fluid is reserved. The sediment is again dried and re-ground and again centrifuged. The process of grinding and centrifuging is continued until the bacilli have all been disintegrated and have gone into solution, and the cell detritus is in suspension. The fluids are combined and mixed with an equal amount of sterile glycerin and so adjusted that each cc. contains 5 mg. of the dried tubercle bacilli first taken. Bacillen Emulsion is a solution of the soluble cell contents of the tubercle bacilli together with the insoluble cell detritus in suspension (cause of its opales-

cence). There are 5 mg. of dried tubercle bacilli in each cc. It is heated to 60 degrees C. for one hour to insure sterility.

As tuberculin is used in dilutions it is necessary to make a suitable diluent. For this purpose sterilize by heating one hour to near the boiling point, 100 cc. distilled or boiled water containing 0.850 gms. salt and 0.4 cc. Trikresol (or 0.5 cc. 95 per cent carbolic acid or 0.5 cc. pure lysol). A sterile 20 per cent glycerin solution is also recommended (glycerin 20 cc., water 80 cc.), especially with T. R. and B. E.

#### **Serial Dilutions Ready for Use**

Are prepared in the laboratory and are ready to administer without further dilution. For the great majority of physicians, these prepared-in-the-laboratory dilutions are the safest to use.

There are several tests for tuberculosis, as the Calmette and the Detre Differential. In the Calmette reaction a drop of 1 per cent solution of purified tuberculin is placed into the eye. If tuberculosis exists in any portion of the body an inflammation develops in the eye treated. This test is not always reliable, as in infants and in advanced stages when it is really not necessary as the existence of the disease is then only too evident.

#### **The Detre Differential Diagnostic Test**

Is to differentiate between a tubercular infection of human origin and one of bovine origin, and also to measure to some degree the extent of the disease, whether incipient or advanced.

The tuberculins required are Tuberculin, O. T., prepared after the method of Koch's old tuberculin. Tuberculin, B. F. (Bouillon filtrate), prepared after the method of Denys from tubercle of the human type, and third, Tuberculin B. F. (Bouillon filtrate), prepared after the method of Denys from tubercle of the bovine type.



A reaction is indicated by an inflammatory area, appearing in 24 to 48 hours, around one or all of the points upon which the tuberculin is applied. The origin of the infection is determined by comparing the different inflammatory areas. Should the inflammatory area around the point at which the "human" tuberculin was applied, predominate, it is an indication of an infection of human origin. Should the predominating inflammation occur around the point at which the "bovine" tuberculin was applied, it is indicative of an infection of bovine origin.

Prof. Detre differentiates between an incipient and an advanced or chronic infection in the following manner,—if all the inflammatory areas be approximately the same size it is an indication of a relatively advanced infection. Again, an advanced infection may be indicated by a high reaction around the point of application of the Tuberculin, O. T., and a moderate reaction at one or both of the other points.

#### Smallpox Vaccine

This remedy is known to all. As the result of the long continued practice of vaccination the one-time terrible plague generally known as smallpox has in some countries become practically extinct. In Germany, where compulsory vaccination is rigidly enforced, the mortality rate from this disease is about 1-10 per cent; in America where vaccination is very irregularly enforced, due to the opposition of misguided cranks, the mortality rate is much higher, nearly 3 per cent. As the result of the use of diphtheria antitoxin, the mortality rate in this disease has fallen from about 40 per cent to about 5 per cent. We may confidently hope that within a decade we may have a reliable cure for the most terrible disease of all, namely tuberculosis.

#### THE BUSINESS SIDE OF PHARMACY

P. E. Mackey, '09\*

Every man has his own ideas regarding the successful management of a drug store, else all the stores would be doing about the same amount of business and there would be no successful pharmacists nor bankrupts.

The first steps, after the store has been nicely fitted out with neat fixtures and everything arranged systematically and conveniently, is to get on the friendly side of the city wholesalers: You might need their good will at some time; also, become well acquainted with your banker, for the same reason. These two are liable to prove valuable assets in case of a "pinch." Keep your store in as new a condition as you possibly can. There is nothing so satisfying to your customers as a neat-appearing store: this means the complete absence of dust or dirt, and having everything kept in its place, and hence no hint of confusion.

Stick to a strictly cash business if possible; it is the best paying one. If it is necessary to do a credit business, be careful to whom you give credit. Adopt some good system of charging your credit sales. In a small business, a day-book and a loose-leaf ledger are all that are necessary. Each credit sale is entered into the day-book and from there posted into the ledger every two, three or four days, as the business requires. It is not good business policy to let entries run too long without posting. In a larger business, one could adopt charge tags and have a cashier who would post these into a journal as fast as they came in. From this journal they could be posted into a ledger, and a duplicate made, by the use of carbon paper. At the end of the month the

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\*This paper was written by a member of the Senior Class in the California College of Pharmacy, in response to a request by one of the lecturers for short papers on this topic.



original itemized bill, in the ledger can be torn out and mailed to the customer, the copy being kept on file. This saves all the work and time of copying.

Bills should be out on the first of the month, without fail. Be regular in this; your customers will respect you. If it is necessary (and it is in a large business), take the items from the last two or three days of the month and add them to the following month's bill calling the customer's attention to this fact by having a notice printed on the bill-heads. All bills should be itemized. Be careful about dunning a person. A little haste is dangerous sometimes, but if you do this and make any threats regarding a collection agency, be sure to carry out your threat in case the customer fails to come through.

All goods that come into the store should be marked, the cost price in code and the selling price in plain Arabic numerals. Don't use the bit sign (/); it is confusing to Easterners, and is apt to be mistaken for the English shilling sign. It is a good idea to let your clerks know your code; it gives them a chance to know what articles they make good on for the boss, and consequently the ones to sell. Be careful not to overbuy, especially on out-of-season goods; this has sent many a man to the wall. Be friendly with the traveling man; he can do you lots of good and turn things your way sometimes. A nice line of "your own makes" is a good thing, and the only thing that will put the money in the bank fast. Select good formulas, neat labels and packages, then fill your windows and cover the tops of your showcases with the goods. They will sell if they are made into the proper packages and have the medicinal virtues you claim for them. Make no misrepresentations upon the labels; there is a Pure Food and Drug Law, you know.

Make your windows talk, also your showcases. People like to note a

change and know what you have for sale besides drugs. Side lines are necessary in these days of keen competition, but try to stick to the legitimate drug trade as closely as possible and only adopt profitable side lines.

Make your prescription department a feature and a money-making one. Don't forget that a neatly capped prescription instils a whole lot of confidence in the patient or patient's relatives, and an ointment "put" into a jar or pot, not "slopped" in, will do as much.

We musn't overlook the most important step—good help. Get good clerks and keep them by treating them as well as your competitor would, and pay them as much. Insist that they be neat, clean, courteous and equally attentive to all.

#### INCORPORATING A PERFUME WITH TALCUM

The material should never be diluted with alcohol, but should be rubbed up with a dry base. For instance, four ounces of orientol or a combination of materials may be incorporated with five pounds of powdered orris root, by rubbing and sifting a number of times, and then allowing to mellow a week before use. This perfume powder is then used in the proportion of from four to twelve ounces to ten pounds of talcum powder. Light colored orris should be used, so as not to darken the color of the talcum. If it is impossible to obtain this, or if for any reason a very slight yellowish tinge is objected to, finely powdered boracic acid may be used instead, but never use magnesia. Magnesia will absorb an oil very easily, but will also give up the odor again very rapidly.

The only benefit in using orris root is that it contains valuable fixative principles, which will make the perfume **much more lasting** in the powder, as it will hold it tenaciously.—  
**Alois von Isaacovics.**



**A GENTLE HINT**

It is a common experience for druggists who do more or less of a credit business to find their liberality in this regard abused. Some credit customers will take advantage and allow their bills to run for months, instead of paying them promptly each month. A San Francisco pharmacist, who has a large business, has had this experience in common with other druggists. Not

wishing to offend his customers, and yet anxious that they should realize his side of the transaction, he uses the following reminder, neatly printed on a card, and encloses it with his overdue bills. We should be glad to have expressions from our readers as to the wisdom of this course. Is it a good thing to do, or can some one suggest a better?

**PLEASE!**

Outstanding on the books there are always from eight hundred to twelve hundred accounts, ranging from fifty cents upwards. Customers frequently say: "This bill was so small I did not bother about paying it sooner," or "I knew you would not worry because you know I am perfectly good for ten times that amount," not realizing that a small bill multiplied a thousand times means a considerable sum of money. Sending a collector involves an expense of 25 per cent, and often gives offense. Many small payments enable a merchant to meet large bills, and checks cannot be issued against "perfectly good" accounts. In return for the courtesy of credit, you are earnestly requested to send your check promptly in settlement, or pay the amount at the store.

**BASHAM'S MIXTURE****A Convenient Way of Preparing It Ex-temporaneously**

\*By C. S. Robertson

In stores where this mixture is prescribed frequently, it is convenient to be able to dispense a freshly made preparation in a few minutes. It is pleasanter to the taste when still retaining a little CO<sub>2</sub> gas, and the liability to become cloudy from deposition of a portion of the iron is eliminated, without making the mixture unduly acid. By keeping the three bottles as suggested below, a prescription can be made up in a few minutes.

The mixture thus made has been kept several weeks without the slightest cloudiness.

**Liquor Ferri et Ammoniae Acetatis****Sol. 1**

Ammon. Carb..... 37.5 Gms.

Aquæ q. s. ad.....500 Cc.

Misce. ft. sol. Filter.

**Sol. 2.**

Acid Acetic, 36%.....140 Cc.

Aquæ q. s. ad.....500 Cc.

Misce. ft. sol.

**Sol. 3.**

Tinct. Ferri Chlor..... 60 Cc.

Glycerin .....180 Cc.

Elix. Aromat. ....180 Cc.

Aquæ q. s. ad.....500 Cc.

Misce.

Take equal volumes of No. 1, No. 2 and No. 3, mixing No. 1 and No. 2 first, then add No. 3. (Example.) For 6 ozs. Basham's Mixture, take 2 ozs. of No. 1, add 2 ozs. of No. 2, and when effervescence has ceased add 2 ozs. of No. 3 and mix.

**U. S. P. Formula**

Tinct. Ferri Chlor..... 40 Cc. 60 Cc.

Acid. Acetic, Dil. 6%... 60 Cc. 90 Cc.

Liq. Ammon. Acet.....500 Cc. 750 Cc.

Elix. Aromat. ....120 Cc. 180 Cc.

Glycerin .....120 Cc. 180 Cc.

Aquæ q. s. ....1000 Cc. 1500 Cc.

**Liq. Ammon. Acet. U. S. P.**

Ammon. Carb. .... 5 Gm.

Dil. Acetic Acid.....100 Cc.

750 Cc. of Liq. Ammon. Acet. you will use  $7.5 \times 5 = 37.5$  Gms. of Ammon. Carb.

$750 \text{ Cc.} + 90 \text{ Cc.} = 840 \text{ Cc.}$  Acetic Acid 6%.

$840 \div 6 = 140 \text{ Cc.}$  36% acid.

\*Read at the Alumni Association of the California College of Pharmacy, May 5th, 1909.



### A DEVOTED SON AND AN HONORED MOTHER

Jas. G. Munson, President of the California Pharmaceutical Association, is one of the most loyal sons of his Alma Mater, the California College of Pharmacy. So loyal is he that we can surely say of him, as Mark Twain's hero said of his friend Scotty, "He never shook his mother." On the contrary, not only does he always have a good word for her, but he incites young men who enter his employ to fit themselves to enter the college, and gives them every encouragement and help to do so. He recently paid a visit to the college, and the following are his impressions formed on that occasion:

The California College of Pharmacy is one of the most interesting places in San Francisco for a pharmacist to visit. Many druggists in the bay cities and other parts of the State, while taking in the different places of learning in the city, never give a thought to an institution where they may spend a few hours and learn many up-to-date ideas in the teaching of theory and practice of pharmacy.

A few weeks ago I paid a visit to the college, where I found the students at work in the pharmaceutical laboratory with a professor and his assistant. The latter were busy overlooking the work of the students, and answering any questions they might ask. On the blackboard were a list of about ten different official preparations, which each student was expected to prepare and make up to the requirements of the Pure Drugs Law. Among them official aromatic waters were being made by the Juniors by six different processes, one of them being a cinnamon water. Walking among the students, I saw between thirty and forty of them all making this water by distillation at the same time. It was an agreeable and instructive sight, for the reason that this particular preparation is not made

in that way in the drug stores. This is simply an example of one of the little things to be learned at college, and is a good example of how to make a saturated aromatic water. Five other aromatic waters were being made by as many different processes, showing how the same end may sometimes be attained by several different methods.

Visiting the Chemical Laboratory, I found the Seniors engaged in volumetric quantitative analysis. The work is outlined on the blackboard, and the students are required by the aid of their laboratory manual to do the work and hand reports of their results to the professor. In the Research Laboratory, I found the graduate class at work, one with a polariscope and others with chemical and microscopical examinations. In the Bacteriological Laboratory, cultures of bacteria and other germs were being made and examined, work that was unknown when I was a student. It occurred to me that many druggists in California should get busy and equip their laboratories with apparatus to make pharmaceutical preparations up to the standard, or buy them from the larger manufacturing concerns.

Considering the present laws under which the pharmacist must prepare preparations, I believe there is only one thing for the young pharmacist to do, and that is to take a full course in a college of pharmacy, where the art and the science of pharmacy are taught as one should know them. I further believe that this will not be from choice but a necessity, for the reason that several States at the present time require that all those who wish to practice pharmacy must produce credentials as being graduates in pharmacy before an examination can be taken before the State Board for a license to practice, and other States are contemplating similar action.

To be a graduate means protection



to the public and to the pharmacist, and incidentally elevation of pharmacy as a profession.

J. G. MUNSON.

### EXTERMINATING GARDEN AND HOUSE PESTS

By F. Pilkington Sargeant

#### Ants

Ants are particularly objectionable to the fruit grower. They pierce the epidermis of the ripe fruit and feed on the sugar contained in the pulp. They also eat their way through the perianth leaves of many flowers in order to get to the honey in the nectaries. Their gravest fault, however, is that they carry about and nourish many pests which are harmful to plants, notably the various kinds of aphides.

The ants' nest is governed by a queen, and is most rigorously controlled. The workers are barren females, and they carefully tend the eggs, which hatch out in from two to four weeks, forming small white legless grubs or larvæ. These are divided into groups according to age, and become pupæ in from one to six months. The pupæ are sometimes covered with a cocoon, sometimes they are naked. They are often called "ant eggs." After some days they emerge as perfect insects, and the older ants may be seen carefully unfolding their legs and otherwise assisting them. The males and females possess wings. The former do not live long, and the latter lose their wings when they settle down to form a fresh nest. The workers are wingless. The nest of the ant, therefore, contains males, females and workers, the last constituting the great majority. Each nest may contain from five thousand to five hundred thousand individuals. There are also troops of aphides and numerous domestic pets in the form of certain blind beetles, etc. The development of individuals is always proportional to the accom-

modation of the nest. From this the difficulty of ridding a greenhouse of ants otherwise than by the destruction of the nest with the queens is obvious. If fifty individuals are poisoned or otherwise die fifty more larvæ than would have otherwise survived are allowed to come to maturity, and the capacity of the nest is again balanced.

If at all possible of application the best remedy is boiling water, which should be poured into the nest. Failing this, carbon bisulphide, nitrobenzene, or paraffin injected into the nest will destroy the insects. A lump of sodium cyanide is also an effectual remedy. The various preparations of which naphthalene is the basis will simply drive the ants from one part of the house to another. A solution of phenol containing 1.25 per cent is often used, and if it does not result in the death of the insects it certainly repels them. One of the most crude and dangerous remedies is a proprietary ant destroyer composed of arsenic and honey. Such a liquid ant destroyer could be made as follows:

#### Arsenical Ant Destroyer (Liquid)

|                       |           |
|-----------------------|-----------|
| Arsenious oxide ..... | 5.00      |
| Sugar .....           | 40.00     |
| Liquid glucose .....  | 20.00     |
| Water .....           | to 100.00 |

Mix the arsenious oxide in very fine powder with the other ingredients.

If the nests cannot be located, one of the two following pastes could be employed. They should be smeared on sticks and placed about the staging of the greenhouse:

#### Nicotine Ant Destroyer (Paste)

|                |       |
|----------------|-------|
| Nicotine ..... | 10.00 |
| Suet .....     | 5.00  |
| Lard .....     | 85.00 |

To these add a trace of oil of anise and color with chlorophyll.

#### Arsenical Ant Destroyer (Paste)

|                       |       |
|-----------------------|-------|
| Arsenious oxide ..... | 5.00  |
| Sugar .....           | 25.00 |
| Liquid glucose .....  | 20.00 |
| Flour .....           | 50.00 |

Or q. s. to form a paste



Flavor with a little oil of anise and color with Paris green. This should not remain in contact with air or moisture, otherwise it becomes uncomfortably sticky. The merest trace of oil of anise must be used. A little appears to attract the insects, but more than a trace repels them. If for any reason the use of liquid or paste be impossible the following powder is very destructive, and is much more effective than ready-made naphthalene powders without lime:

**Ant Powder**

|                   |       |
|-------------------|-------|
| Camphor .....     | 10.00 |
| Naphthalene ..... | 40.00 |
| Lime .....        | 50.00 |

This may be sprinkled about the haunts of the insects or, better still, be introduced into the nests.

**Beetles**

The Coleoptera, like the other members of the class Insecta, are more destructive when in the larval condition than in any other state. It is, therefore, when they are feeding heavily as larvæ that they should be destroyed. Despite all precautions many come to maturity and cause infinite trouble to the gardener. Cockroaches are particularly destructive to orchids, devouring the pseudo-bulbs; they also attack the succulent portions of many other plants. Many formulæ of beetle powders have been published, and there are many proprietary preparations. These nearly all contain borax as the essential ingredient. One of the most simple of these, particularly attractive to cockroaches, is the following:

**Cockroach Powder**

|             |       |
|-------------|-------|
| Borax ..... | 60.00 |
| Sugar ..... | 20.00 |
| Flour ..... | 15.00 |
| Cocoa ..... | 5.00  |

A little of this powder should be placed on paper and laid in the haunts of the insects every night.

(See Roach Exterminators next page.)

Another formula, which is more gen-

erally applicable than the above, is as follows:

**Beetle Powder**

|                        |       |
|------------------------|-------|
| Barium carbonate ..... | 15.00 |
| Borax .....            | 30.00 |
| Sugar .....            | 25.00 |
| Ground rice .....      | 20.00 |
| Calcium sulphate ..... | 10.00 |

This should be suitably colored and used in the same way as the above. Sometimes it is much more convenient that the vermicide be in the form of a paste. A suitable paste for cockroaches and other beetles may be made as follows:

**Beetle Paste**

|                  |       |
|------------------|-------|
| Phosphorus ..... | 1.00  |
| Lard .....       | 20.00 |
| Flour .....      | 60.00 |
| Sugar .....      | 10.00 |
| Water .....      | q. s. |

Melt the phosphorus with about ten parts of water, pour this on to the lard, rub briskly, add the flour and sugar, and work into a paste.

On the Continent the use of highly toxic substances for the destruction of beetles and pests in general appears to be more popular than with us. One of the best-known German beetle powders is made as follows:

**German Beetle Powder**

|                            |           |
|----------------------------|-----------|
| Mercuric chloride .....    | 0.05      |
| Rye flour .....            | 20.00     |
| Borax in powder .....      | 40.00     |
| Oil of eucalyptus .....    | 0.10      |
| Angelica root in powder .. | to 100.00 |

The mercuric chloride is sometimes replaced by double its weight of arsenious oxide in the above formula.

A popular French beetle powder consists for the most part of basic ferric arsenate. It is stated that this preparation is quite harmless to human beings and domestic animals. It can be prepared by precipitating a suitable quantity of solution of ferric sulphate with a mixture of sodium arsenate and sodium bicarbonate. The precipitate is washed free from all soluble matter and dried. For use, one part of the powder is well mixed with about one



part of sugar and four parts of boiled potato. This is made into a soft paste with water, and "laid in all such places as the cockroaches or blackbeetles generally resort to."

### Snails and Slugs

Snails and slugs are amongst the most ravenous of the gardener's enemies. They are found in the kitchen garden, flower garden, field and greenhouse, and, though they appear to thrive best in a warm, moist atmosphere, they are capable of withstanding violent changes of temperature. Slugs lay enormous numbers of eggs, which they deposit under old leaves, twigs, and other rubbish during the greater part of the summer and autumn. They are, perhaps, the greatest enemies of the orchid inside, and of the dahlia outside. They feed at night, particularly after rain. They are often introduced into the orchid house in the sphagnum moss. This should, therefore, always be carefully examined before its introduction. The plants should be placed over water, and a little cotton wool should be wrapped round the base of each inflorescence. For dahlias and general outside use one of the best deterrents is a mixture of soot and lime or naphthalene and lime lightly mixed with the top soil. If the ground be watered with lime water or a 0.75 per cent solution of ammonium carbonate, the slugs will come to the surface, and may be collected and destroyed. In France ferrous sulphate has been used successfully for the destruction of slugs, the quantity used approximating to 265 pounds to the acre.

### Wasps

Wasps do a vast amount of damage in the fruit garden, and many of the larger fruit growers depute men especially to seek out and destroy the wasp nests in the vicinity. The workers in the wasp nest, unlike the ant workers, perish in the autumn. In the

spring, therefore, the only surviving wasps are the females. As each of these may found a nest it is imperative that every effort should be made to destroy as many wasps as possible early in the year. Carbon bisulphide, arsenical preparations, etc., as described above in the treatment of ants are used for the destruction of wasps. The best method to employ is the following:

Prepare a saturated solution of sodium cyanide, soak half a sheet of wadding in this, and push it into the mouth of the nest. After the lapse of about twelve hours dig out the nest and burn it to destroy the larvæ.—**Pharm. Journ.**

### ROACH EXTERMINATORS

The *Spatula* gives the following:

Powdered yellow root, 2 oz.; powdered capsicum, 1 oz.; powdered borax, 1 oz. Melt.

2. Wheat flour, 2 oz.; powdered sugar, 4 oz.; powdered borax, 1 oz.; unslacked lime, 1 oz. Mix. Keep dry; place on paper or put where the roaches infest.

3. Powdered borax, 1 lb.; powdered sugar,  $\frac{1}{4}$  lb.; powdered cocoa, 2 oz. Mix.

4. Phosphorous (amorphous),  $\frac{1}{2}$  lb.; Paris green,  $\frac{1}{2}$  lb.; wormwood herb (powd.), 8 lb.; sabadilla,  $\frac{1}{2}$  lb. Mix well.

5. Glucose, 1 pt.; naphthaline, 1 oz.

### Destroying Worms on Lawns

Water with (a) a solution of alum, (b) infusion of mustard, (c) lime-water, (d) half per cent solution of ammonium carbonate, (e) solution of mercuric chloride. The last-mentioned is made by dissolving

|                         |        |
|-------------------------|--------|
| Mercuric chloride ..... | 1 lb.  |
| Hydrochloric acid ..... | 20 oz. |
| Water .....             | 1 gal. |

To use, add a cupful of this solution to 10 gallons of water.—**C. & D.**



## Soda Fountain Department

### Preparing the Soda Fountain for the Coming Season

By A. L. Rich

May, the forerunner of summer, is always the time to start, and make a general clean-up of the fountain and other apparatus pertaining to the business. It is well to look after all the working parts very carefully and have all couplings replaced with new washers, and all movable joints and parts tightened, so as to avoid trouble during the hot season. See that all leaks and breaks are mended and soldered. Go over the carbonator carefully and see that all parts are in good working order, especially the pump and regulator gauge. See that all syrup receptacles are well cleaned with boiling water, and all metal parts thoroughly scoured and polished. By doing this a great deal of trouble and delay, to say nothing of expense, will be avoided. If possible, commence with two or more new beverages, so as to give your customers the chance to see that you have not forgotten their last year's patronage, and are going to give them a treat on some entirely new drinks. A few neat strip signs on the front show windows will be effective.

Now is the time to have your season's contract made for your supply of sweet cream, so that during the extremely hot spells you will not be short of cream. Let your neighbor worry if he failed to look ahead. Make contracts for your fruits and other staple supplies which you will need. It is surprising how much time and labor these few points will save.

If you do not keep your dispenser the year round, you will have to hustle for a good one as they are about all placed by this time; although your jobber generally has a list of boys, and probably can recommend a good

man. Look out for the so-called professional dispensers; as a rule you will find that they all have the same catechism of answers to your questions, that they have worked in almost all of the best known places and in most cities in your vicinity. The majority smoke cigarettes, drink, etc. I find that the one who has the least to say generally turns out to be the best man.

You will find that a neat and attractive menu card is a good trade getter. It not only serves as a bill of fare, but a good advertisement as well. A great many customers may want copies as souvenirs to send to their friends, especially if the souvenirs are original in design and make-up.

Don't have too much bric-a-brac, flower-pots and useless ornaments stacked around your apparatus. Give the fountain all the chance possible to show for itself. How would a beautiful statue look all bedecked with artificial plants and cheap tin signs saying "Drink So-and-So for Chills and Fever"? The laity know that a soda fountain is a place to get something to drink, and it will not take them long to find out what you have. It is not always the fountain that has the longest list of drinks which does the most business, but the one that has the best and **coldest** soda; so see that your carbonated water is always cold, and your flavors all made of the very best material obtainable, especially the fruit syrups. The most important point to watch is to see that the beverages are not served too sweet, as very few people like extremely sweet drinks. Also see that the dispensers thoroughly mix the drinks before serving. Using cracked or shaved ice in drinks is a mistake, for ice tends only to make a drink taste flat. The only drinks in



which it can be used to advantage is in lemonades and beverages made with still water, not carbonated. Frappes should all be shaken without ice; when strained, use only the coarse stream and serve quickly, otherwise they will be too flat to be good.

Egg drinks are beginning to be very popular, and prove to be profitable if served rightly. Keep your supply out of sight, as there is nothing very attractive about a bowl of eggs on the counter, and in serving egg drinks, see that they are well shaken with cracked ice so as to chill and perfectly emulsify the egg. Under no conditions should egg drinks be made without ice. Serve as quickly as possible, as they soon become flat if left standing, or poured from the glass to the shaker too much.

Lemonades are another class of drinks that should be made with care. Under no circumstances should any acid be used, only pure lemon juice. Once your customers know that you use lemon juice and nothing else, you will be surprised how many lemonades you will be serving. I find that by squeezing my day's supply in the morning and keeping it in ice, it will not get musty as it generally does. A good point is not to keep it all in one large bottle, but two or more smaller ones, because the less air there is in the bottle the better it will keep.

A good feature to keep your fountain before the public is to specialize one good drink. It does not matter exactly what one,—but the one you choose, make it the top notch. In fact, put all of your energy to make it better than any of your competitors. Don't stop at the cost of extra quality of material to make it. The first thing you know everybody will be talking about your particular drink, the way you serve it, how it looks, etc., and that gives strength to your entire service, and Mr. Smith and Mr. Jones will wonder how you get the business.

## REPORT ON PURITY OF MILK AND FOOD IN SAN FRANCISCO

The subjoined summary of the work of the City Chemist shows that there is still need of the inspection of foods and drinks as carried on by the City Board of Health. It would appear that the milk served in restaurants is not as good as that sold in stores, and the latter not equal to that delivered by the milk wagons. The meats examined showed a larger proportion unfit for food (eight orders for arrest being given out of thirty-seven samples examined).

With such a showing it is clear that the City Chemist is a necessity.

### Summary of Work of City Chemist

The following is a summary of the work done in the chemical laboratory of the Board of Health during March, 1909:

#### Milk

|                                                            |       |                      |      |
|------------------------------------------------------------|-------|----------------------|------|
| Samples taken from—                                        |       |                      |      |
| Milk wagons                                                | ..... | 79; below standard.. | 5    |
| Milk depots                                                | ..... | 11; " "              | 1    |
| Shippers                                                   | ..... | 81; " "              | 3    |
| Restaurants                                                | ..... | 54; " "              | 26   |
| Stores                                                     | ..... | 17; " "              | 7    |
| Bakeries                                                   | ..... | 2; " "               | 0    |
| Submitted by—                                              |       |                      |      |
| Public institutions                                        | 5;    | " "                  | 0    |
| Private individuals                                        | 5;    | " "                  | 0    |
| Total number of samples analyzed                           | ..... |                      | 254  |
| Total below standard                                       | ..... |                      | 42   |
| Percentage below standard                                  | ..... |                      | 16.5 |
| Samples sufficiently below standard to                     |       |                      |      |
| warrant arrest                                             | ..... |                      | 23   |
| Standard 3 per cent milk fat; 8.5 per cent solids not fat. |       |                      |      |

#### Meat

(Chopped and Sausage)

|                                                                       |    |
|-----------------------------------------------------------------------|----|
| Samples analyzed (representing                                        | 16 |
| dealers)                                                              | 37 |
| Samples found to contain dyes or chemical preservatives (representing | 8  |
| dealers)                                                              | 16 |
| Ordered arrested                                                      | 8  |

#### Miscellaneous

|                                                                                                                              |    |
|------------------------------------------------------------------------------------------------------------------------------|----|
| Suspected preservatives, 8 samples; butter, 1 sample; condensed milk, 1 sample; vinegar, 1 sample; dynamite, 1 sample; total | 12 |
|------------------------------------------------------------------------------------------------------------------------------|----|

#### Water

|                                                                                        |     |
|----------------------------------------------------------------------------------------|-----|
| From Spring Valley Reservoirs and Lake Merced, 22 samples; well water, 1 sample; total | 23  |
| Total number of all analyses                                                           | 326 |



## Pharmaceutical Colleges, Societies and Boards

### CALIFORNIA COLLEGE OF PHARMACY

The following members of the Graduate and Senior classes have successfully completed their respective courses and have been graduated by the University of California:

#### Bachelors of Pharmacy

James Andrew Arkin, Ph. C. 1908 (U. C.), San Francisco.

Francis Joseph Belz, Ph. C. 1908 (U. C.), Reno, Nev.

#### Pharmaceutical Chemists

Ernest Edward Bourne, East Auburn.

Winfield Scott Carl Buchner, San Francisco.

Richard J. Chatten, Visalia.

Leon Hillaire Fairchild, Placerville.

Oswald Herman Charles Frisch, San Francisco.

Claude Thomas Headen, Gilroy.

Hans Christian Hedegard, San Francisco.

Alfred Henry Heying, Anaheim.

Birdie Pearl Hudson, San Francisco.

Walter Clifford Johnson, Berkeley.

Philip Ernest Maas, San Francisco.

Percival Edward Mackey, Avalon.

Arthur John McNeil, Tucson, Ariz.

David William Ostrom, Kingsburg.

Charles James Antone Peacock, San Francisco.

Ivory Gladstone Rodda, Sacramento.

Granville Avery Schoen, Gridley.

Dolph Tuggle, Silverton, Ore.

Louis Frederick William Winkler, Woodside.

**I. G. Rodda** was awarded the Herbert E. Law Scholarship (one year's work in the graduate class), and **Alfred Henry Heying** the Faculty Scholarship.

**Fred West** completed the special course in Chemical, Microscopical and Bacteriological work in the Examination and Analysis of Drugs and Foods, and received the certificate for such special work.

### ALUMNI ASSOCIATION OF THE CALIFORNIA COLLEGE OF PHARMACY

The annual meeting of this Association was held in the Lecture Hall of the California College of Pharmacy at the Affiliated Colleges on Wednesday evening, May 5, at 8:30 p. m.

The proceedings commenced with the reading of papers, the first of which was on "A New Method for the Determination of Morphine in Opium," by Jas. A. Arkin, '08. The object of this paper was to present a workable process for the estimation of morphine in opium that would give reliable results in much less time than the process of the Pharmacopoeia. We hope to publish this paper in our next issue. While it is not as exact as the U. S. P. method, inasmuch as the amount of alkaloid obtained is only approximate, nevertheless when all the conditions are duly observed, it appears that the approximation is the same in every case, and by the use of a factor which had been determined, the relation between the result obtained and the total alkaloid present can be ascertained with sufficient accuracy for commercial purposes, and probably also for pharmaceutical.

E. E. Bourne, '09, read a paper on "Castor Oil," his object being to show the easiest way of administering this medicine which continues to retain its hold on medical practice notwithstanding its nauseousness. No amount of elegant pharmacy seems to be able to drive castor oil out of the nursery and sick room. It is important therefore to find the least objectionable method of administering it.

Fred West read a somewhat exhaustive paper on "The Opsonic Index," showing its use and how the index was obtained.



The last paper was "The Estimation of Sparteine of Scoparius," by F. J. Belz, '08.

The proceedings were enlivened by a vocal solo by H. Gilmer, who sang as an encore, "Said the Boy who Stuttered and the Girl who Lisperd," provoking rounds of applause for his inimitable take-off. He was accompanied on the piano by V. W. Giddings.

Next came the formal business of the Association, reports of the retiring officers and the election of new ones. The following are the officers for the ensuing year:

President—A. S. Musante, M. D.

First Vice-President—G. A. Schoen.

Second Vice-President—Miss M. Dolcini.

Secretary—Miss C. Roehr.

Trustees—J. Taggart, '10; W. B. Philip, '10; C. J. Abraham, '10; F. W. Nish, '11; A. S. Musante, M. D., '11; H. M. Simmons, M. D., '11; Miss C. Roehr, '11.

Delegate to the Alumni Association of the University of California--Dr. H. M. Simmons.

The retiring president, having served in that capacity for five years, positively declined re-election.

We understand that a considerable proportion of the graduating class made application for membership.

Afterwards the company adjourned to the library, where a very elegant spread of "Pure Food" awaited the guests. The tables were beautifully decorated with sweet peas, pinks and asparagus ferns. The newly elected president, Dr. A. S. Musante, acting as toastmaster, called upon a few of those present for impromptu speeches, and after sundry Rah! Rah! Raahs! and yells, the party adjourned before the owl cars had stopped running.

If a druggist isn't given a golden harp and crown when he dies, will he be satisfied with "something just as good"?

## ARKANSAS PHARMACEUTICAL ASSOCIATION

As we go to press the Arkansas Association of Pharmacists is in session at Pine Bluff, Ark., the meeting being scheduled for May 11, 12 and 13, at the Hotel Jefferson. Among the subjects to be discussed are the Parcels Post, Pharmacy and Prohibition, The American Druggists' Syndicate, Druggists' Fire Insurance, The Ethics of Commerce, and reports of committees in abundance. In the line of practical pharmacy and trade topics the programme recites The Prescription Register and Filing Prescriptions, Weights and Measures, Percentage Solutions, Colorimetric Standards, Ambidexterity in Pharmaceutical Manipulations, Compounding and Dispensing, Propaganda Selections, Pharmaceutical Elegance, Drugs as a Commercial Asset, Bookkeeping, The Inventory, The N. A. R. D., and various laws affecting druggists. Besides all this work, the Committee of Arrangements have provided "a very elaborate program of entertainment," so there is "something doing" at Pine Bluff these May days.

## CALIFORNIA STATE BOARD OF PHARMACY

The following persons were successful at the last examinations of the State Board:

### Licentiates

Frank Arrigo, Jr.  
Perry Leroy Fallis  
Jerome J. Green  
G. L. Irwin  
George V. Morrison  
Clara E. Nichols  
Winona M. Nielsen  
Marvin B. C. Rounds  
Charles Daniel Taylor  
George S. Adams  
Ralph C. Amsden  
Donald J. Buckley  
N. W. Clinger  
W. Sinclair Coleman  
W. Bert Corner



Arthur Davis  
Wm. Francis Hall  
Johannes Jensen  
Thomas C. Kenneally  
Hugo G. Lagan  
James R. Laird  
Earl A. MacDonald  
Percy E. Mackey  
D. B. Martin  
Grover C. Mathews  
Lewis J. Renshaw  
Ralph H. Rogers  
A. L. Simmons  
Henry Radcliffe Wells

**Assistants**

Otto W. Berdrow  
Emile A. Simons  
Roy Alton Stauffer  
Harold Preston Darling  
Benjamin H. Dill  
E. Allen Heller  
Oke Meyerhoffer  
Henry L. Pingel  
Della B. Rogers  
Ralph H. Glezen  
Adolph Schulte, Jr.  
Thomas Franklin Ashley  
Leon Brink  
Charles Lincoln Eby  
Harry M. Emes  
James R. Filgate  
John A. Flynn  
Frank Healy  
Frank McCarty

**On Credentials**

A. W. Boggs  
Reuben M. Coffin  
Jabez T. Crane  
Geo. E. Cravens  
P. M. DesMarais  
Henry H. Forline  
Samuel Franklin  
O. A. Griffis  
J. E. Jones  
Emil Klinkowstroem  
Lars Peter Knos  
B. W. McCandless  
Steven D. Nill  
T. G. Scales  
George Blake Stewart  
George B. Weiss

Committees on Los Angeles meetings (August 13, 14, and 16 to 20).

**Finance**

F. D. Owen,  
L. N. Brunswig,  
Ludwig Schiff.

**Hotels and Halls**

F. M. Boswell,  
Arthur W. Kinney,  
S. F. Bothwell.

**Entertainment**

Alden W. Skinner,  
Chas. F. Noyes,  
G. G. Johnson.

**Transportation**

W. R. Dickinson,  
W. L. Leland,  
D. W. Kirkland.

**Exhibits**

J. J. Freeman,  
Chas. H. Ward,  
R. A. Whidden.

**Publicity**

F. N. Drake,  
Prof. H. A. Peairs,  
Geo. H. McLain,  
T. W. Jones.

Local Secretary, T. W. Jones.  
Office of Executive Committee, 300  
North Los Angeles Street.

The Utah Pharmaceutical Association will meet at Salt Lake City, on Wednesday and Thursday, July 14th and 15th. Secretary F. E. Whitworth says: "Keep it well in mind, and make your plans accordingly. Do not allow anything to interfere with this important event."

**A COSTLY MISTAKE**

Edward A. Miller, a druggist in the Bronx, will have to pay Mrs. Edith Dreyer \$8,000 and her husband \$460 for doctors' bills and medicine.

Mrs. Dreyer ordered Miller to fill two prescriptions two years ago, one for ergot and the other for lysol, a poison.

In court she proved that he filled both bottles with lysol. As a consequence she was made ill and has not fully recovered. She claimed \$10,000 damages.



## Notes and Comments

### A DEAD FAKE RAISES ITS HEAD AGAIN

We were under the impression that that good old fake, **Radam's Microbe Killer**—one of the worst and most fraudulent of all nostrums—was dead and buried for good. Not so, evidently. Or if it was dead and buried, it has been resuscitated. For on passing **Hegeman's** drug store (at 200 Broadway) one day last week, our attention was attracted by a large window display, which consisted of hundreds of bottles of that nostrum. We procured a bottle. And this bottle will serve us as a text for three sermonettes.

#### Number I—A Typical Nostrum Fake

(Here follows a tirade on Radam's Microbe Killer, concluding as follows):

But why waste space on that miserable drivel, full of ignorance, cupidity and fraud? It is sufficient to state that we consider the sponsors and backers of this nostrum cheats and liars and worthy of the deepest contempt of every decent man. There can be no question as to the pernicious effect of such a nostrum—if not positively injurious it is negatively deadly by preventing people afflicted with serious and dangerous diseases from seeking proper medical aid at the proper time.

But who is instrumental in spreading, giving prestige to and in popularizing such nostrums? The answer to this question leads us to the second point in this article.

#### Number II—The Department Stores of Hegeman, Riker, Etc.

I have stated at the outset that the grandiose display of Radam's Killer was in the window of one of Hegeman's drug stores. And without beating about the bush I will state it as my positive conviction, that with the exception of the newspapers, the big drug stores, particularly the chain-stores,

such as those of Hegeman, Riker, Bolton, Cora Dow, etc., are more responsible for the persistence and the spread of the nostrum evil than any other single factor (or in fact than all other factors combined, with the above-mentioned exception). The average druggist has finally become awakened to the danger of the nostrum evil, and to the impropriety, nay dishonesty, of pushing and recommending potent remedies for serious diseases. And if we had to deal with the average druggist alone, the influences of the pharmaceutical press and of the pharmaceutical societies would be sufficient to induce him—the druggist—to have nothing to do with these nostrums, which may be characterized as distinctly fraudulent. But we can do nothing with those "big" drug stores (department stores would be a more correct appellation). They—The Hegemans, The Rikers, etc.—do not give a rap for pharmacy as a profession; they sneer at the word "professional"; they are in pharmacy **exclusively** for the money there is in it, and they will push, advertise and display any nostrum, no matter how vile and fraudulent, provided they are given a sufficiently high discount to make it "worth their while." And it is these big cut-rate corporation drug stores with unlimited capital (Hegeman's is backed by the Standard Oil Company, while the tobacco octopus is said to be behind Riker's) that hurt true professional pharmacy more than anything else does. And not only are they not professional themselves, but they prevent others from being so. For the smaller druggist, in order to exist at all, is, often against his will, obliged to follow in their footsteps, take in unprofessional side-lines, make objection-



able window displays, etc. And many a professional pharmacist is pushed to the wall and put out of business altogether by the continuous growth and branching out of the unprofessional corporation drug stores. And while we are on the subject, we might mention the fact that these stores are the finest substitution schools in the country. Any clerk who has worked in one of these stores for some time can never after sell the thing asked for without a pang in his heart. You can never go into one of these corporation stores and ask for an article of a definite brand without being graciously informed that "our preparation is much better" ("just as good" has gone out of style) or "our bottle is double the size."

**The greatest menace to professional pharmacy today is the corporation drug store.**

#### **Number III—The Effect of the Guarantee**

We now come to our third and last point. We stated in a former editorial in the **Critic and Guide** that the Pure Food and Drugs Act "guarantee" did an incalculable amount of harm by making the people believe that the "guarantee" was given by the Government. It is altogether unfortunate that the word "guarantee" should have been used. Now, the very worst and lowest of nostrum manufacturers can, by complying with a few insignificant and altogether unessential rules, parade before a gullible public the statement that his product is "guaranteed." There could not be anything worse than Wm. Radam's Killer; it is fraudulent in its claims from beginning to end, and still it has in prominent letters the legend: "Guaranteed under the Pure Food and Drugs Act, June 30th, 1906, No. 793." Of what benefit is a pure food and drugs law when such nostrums can be sold freely and their manufacturers are permitted to lie to their heart's content? The "guarantee" is much more of an aid than a hindrance to the nostrum business.

I would summarize this article, which has grown to a rather inordinate length, as follows:

1. Wm. Radam's (Microbe) Killer is a wretched fraudulent nostrum, which, dead for some years, is now beginning to raise its head again. Those who have the public weal at heart should not permit it to be resuscitated. Perhaps this article will cause the second funeral of this nostrum, and let us hope that when it is buried now it will stay buried.

2. The big corporation drug stores (Hegeman's, Riker's, etc.) are the greatest obstacles in the way of professional pharmacy and constitute the most powerful support of the nostrum evil.

3. The so-called pure food and drugs guarantee has proved more of a help than a hindrance to the nostrums, even of the lowest character. The word "guaranteed" should be eliminated altogether. Merely the serial number should appear.—**Critic and Guide.**

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The results of the recent Minor Examination in London and the Minor and Major Examinations in Edinburgh are published this week. Sixty-six candidates out of 213 examined passed the Minor in London, and in Edinburgh thirty-six were successful out of a total of eighty-three who sat for the Minor Examination. Three candidates also sat for the Major Examination in Edinburgh, but all failed to pass.

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The hotels of Los Angeles are among the finest in the land. They are getting ready to entertain the A. Ph. A. and the California druggists. The Hollenbeck Hotel is one of the most comfortable, is right in the heart of the city and well equipped to take care of its guests.

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Los Angeles has 200 churches. Now will you be good?



**CULTIVATING CASCARA SAGRADA**

In an article on this drug in the **Kew Bulletin** (No. 10, 1908), attention is directed to the fact that it is quite hardy in England—at all events, at Kew—forming bushy trees 18-21 feet in height, with a clear trunk 4-5 feet in length. According to the information received from Mr. F. R. S. Balfour, the trees are rapidly becoming exterminated in Washington and Oregon, about fifty cartloads of the bark, worth £100,000, having been forwarded last year from these districts, and he suggests that the tree might be cultivated with advantage in Western Ireland and Scotland. But the director of Kew Gardens thought that it would be desirable to ascertain if bark grown in this country is as active as that imported from the United States, and to ascertain this, 5¾ lbs. of the dry bark of a tree grown at Kew were forwarded to the Wellcome Research Laboratories and examined by Dr. H. A. D. Jowett. The report received at Kew stated that the present extract is indistinguishable in its action from that made from American bark, and the physician to whom tablets made from it were submitted reported them to be equal to the average of tablets produced from bark grown in America. Dr. Jowett also reported that no difference could be observed between the chemical character of the fresh bark one year old and that of the so-called mature bark three years old, and that beyond slight differences in the amount of extractive the examination of **R. Purshiana** and of **R. Californica** gave identical results. The latter species, as well as its varieties, **R. tomentella** and **R. oleifolia**, are evergreen shrubs of bushy habit, and are also hardy at Kew. The average yield of a tree of **R. Purshiana** is about 10 lbs. of bark, and as 1,000,000 lbs. of the drug are required annually, some 100,000 trees have to be sacrificed annually. The

trees could probably be treated in coppice fashion, as shoots are readily sent up from the stumps. The tree from which the bark experimented with was derived was seventeen years old. The fruits are not freely produced in this country, and imported seed does not germinate well. Mr. E. M. Holmes, who has grown both **R. Purshiana** and **R. Californica** at Sevenoaks in Kent, confirms the above statements, so far as Kent is concerned. The plant grows freely, is deciduous, like the British species, and is equally hardy, but **R. Californica**, which is evergreen, is not quite so hardy in Kent, and suffers more from drought in summer.—**Pharmaceutical Journal.**

**SPANISH EDITION OF THE UNITED STATES PHARMACOPŒIA, EIGHTH REVISION**

This work, being a legal standard under the pure food and drug law in our Spanish speaking possessions, it became almost necessary that it be published in their own language. Accordingly a translation has been made by direction of the Board of Trustees of the U. S. Pharmacopoeial Convention, and the work is now published and is for sale by the American Drug-gist Publishing Company of New York. Professor Joseph P. Remington, chairman of the committee of revision of the U. S. P., has this to say about the Spanish edition:

The Spanish Translation is from the latest revised text and it is confidently hoped that it may prove a potent factor in elevating the professions of medicine and pharmacy by furnishing a guide to the preparation of medicines accurately from drugs of the highest quality.

The Committee of Revision and the editor of the Spanish edition have labored earnestly to produce a standard work which will merit the approbation of scientific men, and science knows no language and no country.



**DEATH OF CHARLES W. FISCHER**

Information has been received of the death of Charles W. Fischer at Stuttgart, Wurtemberg, Germany. Mr. Fischer was formerly a resident of San Jose, where he had a drug store at 35 South First street.

The deceased was about 64 years of age at the time of his death, which was the result of a surgical operation the nature of which was not disclosed in the communication received by Mr. Pellerano. Mr. Fischer survived but three days thereafter.

His death was quite unexpected to his friends and acquaintances. At no time in his recent letters, was any mention made of a malady indicating the probability of a surgical operation. At the request of the deceased, his body was cremated.

Mr. Fischer located in San Jose and engaged in the drug business over 30 years ago, buying out the drug store of Dr. Lee in company with a Mr. Hopper. The partnership was of short duration, Mr. Fischer acquiring Mr. Hopper's interests and continuing the business with great success up to June, 1900, when he took into the business his former clerk, N. A. Pellerano. This partnership continued up to a few years ago when Mr. Fischer withdrew from the activities of the business to spend the remainder of his days at his old home in Germany.

Mr. Fischer had a wide acquaintance in San Jose and enjoyed the reputation of being not only a skillful apothecary but an exceedingly well-read man of broad, general culture. The news of his sudden death was received among his many friends here with feelings of profoundest sorrow.

**DEATH OF J. H. REDSECKER**

News has just reached us of the death of Jacob H. Redsecker, Ph. M., at his home in Lebanon, Pa. He had been in ill health nearly three years. He was an active member of the

American Pharmaceutical Association for many years, and his familiar face and genial disposition will be missed by many of the older members. He was particularly active as a member of the Pennsylvania Pharmaceutical Association, of which he was president in 1897. He was one of the first of the Eastern contingents of the American Pharmaceutical Association, to whom the writer was personally attracted, and for whom he always looked at every meeting of the association.

**THE NEW POISON LAW**

An act to amend the title of and sections 1, 7, 8 and 9 of an act entitled "An act to regulate the sale of poisons in the State of California, and providing a penalty for the violation thereof," approved March 6, 1907. (Approved March 19, 1909.)

The people of the State of California, represented in senate and assembly, do enact as follows:

Section 1. The title of an act entitled "An act to regulate the sale of poisons in the State of California and providing a penalty for the violation thereof," approved March 6, 1907, is hereby amended so as to read as follows, viz.:—"An act to regulate the sale and use of poisons in the State of California and providing a penalty for the violation thereof."

Sec. 2. Section 1 of said act entitled "An act to regulate the sale of poisons in the State of California and providing a penalty for the violation thereof" approved March 6, 1907, is hereby amended so as to read as follows:

Section 1. It shall be unlawful for any person to vend, sell, give away or furnish either directly or indirectly, any poisons enumerated in schedules "A" and "B" in section seven of this act set forth as hereinafter set forth in this act, without labeling the package, box, bottle or paper in which said poison is contained, with the name of the article, the word "poison" and the name and place of business of the person furnishing the same. Said label shall be substantially in the form hereinafter provided. It shall be unlawful to sell or deliver any of the poisons named in schedule "A" or any other dangerous poisonous drug, chemical, or medicinal substance, which may from time to time be designated by the State Board of Pharmacy of California, unless on inquiry it is found that the person desiring



the same is aware of its poisonous character, and it satisfactorily appears that it is to be used for a legitimate purpose. It shall be unlawful for any person to give a fictitious name or make any false representations to the seller or dealer when buying any of the poisons thus enumerated. Printed notice of all such additions to the schedule of poisons named and provided for in this section, and the antidote adopted by the board of pharmacy for such poisons, shall be given to all registered pharmacists with the next following renewal of their certificates. It shall be unlawful to sell or deliver any poison included in schedule "A" or the additions thereto, without making or causing to be made, an entry in a book kept solely for that purpose, stating the date and hour of sale, and the name, address and signature of the purchaser, the name and quantity of the poison sold, the statement by the purchaser of the purpose for which it is required, and the name of the dispenser, who must be a duly registered pharmacist.

Said book shall be in form substantially as follows:

| Date and Hour | Name of Purchaser | Residence | Kind and Quality | Purpose of Use | Signature of Druggist | Signature of Purchaser |
|---------------|-------------------|-----------|------------------|----------------|-----------------------|------------------------|
|---------------|-------------------|-----------|------------------|----------------|-----------------------|------------------------|

This book shall always be open for inspection by the proper authorities, and shall be preserved for at least five (5) years after the date of the last entry therein.

Sec. 3. Section 7 of said act is hereby amended so as to read as follows:

Section 7. Any person violating any of the provisions of section eight of this act shall upon conviction be punished as follows, viz.: for the first offense by a fine of not less than one hundred dollars, and not to exceed two hundred and fifty dollars, or by imprisonment for not more than 100 days, or by both fine and imprisonment; for the second offense by a fine of not less than two hundred and fifty dollars, and not exceeding five hundred dollars, or by imprisonment for not more than 200 days, or by both such fine and imprisonment; and for the third offense by imprisonment in the state prison for not less than one year and not more than five years. Any person violating any of the provisions of this act, except those contained in section eight, shall be deemed guilty of a misdemeanor and upon conviction shall be fined in a sum not less than thirty dollars, nor more than one hundred dollars, or by imprisonment for not more than fifty days or by both such fine and imprisonment. All fines collected shall be

paid seventy-five (75) per cent to the state board of pharmacy, and twenty-five (25) per cent to the county treasurer of the county in which the prosecution is conducted.

The following is schedule "A" referred to in section one, viz.:

Schedule "A," arsenic, its compounds and preparations, corrosive sublimate and other poisonous derivatives of mercury, corrosive sublimate tablets, antiseptic tablets containing corrosive sublimate, cyanide of potassium, strychnine, hydrocyanic acid, oils of croton, rue and tansy, phosphorus and its poisonous derivatives or compounds, compound solution of cresol, lysol, strophanthus or its preparations, aconite, belladonna, nuxvomica, veratrum viride, their preparations, alkaloids or derivatives. The following is schedule "B":

Hydrochloric or muriatic acid, nitric acid, oxalic acid, sulphuric acid, bromine, chloroform, cowhage, creosote, ether, solution of formaldehyde or formalin, cantharides, cocculus indicus, Indian hemp or their preparations; iodine, or its tinctures, oils of savin and pennyroyal, tartar emetic and other poisonous derivatives of antimony, sugar of lead, sulphate of zinc, wood alcohol.

Sec. 4. Section 8 of said act is hereby amended to read as follows:

Section 8. It shall be unlawful for any person, firm or corporation to sell, furnish or give away, or offer to sell, furnish or give away, or to have in their or his possession any cocaine, opium, morphine, codeine, heroin or chloral hydrate or any salt derivative or compound of the foregoing substances, or any preparation or compound containing any of the foregoing substances or their salts, derivatives or compounds, except upon the written order or prescription of a physician, dentist or veterinary surgeon licensed to practice in this state, which order or prescription shall be dated and shall contain the name of the person for whom prescribed, or if ordered by a veterinary surgeon shall state the kind of animal for which ordered and shall be signed by the person giving the prescription or order. Such written order or prescription shall be permanently retained on file by the person, firm or corporation who shall compound or dispense the articles ordered, or prescribed, and it shall not be again compounded or dispensed if each fluid or avoirdupois ounce contains more than eight grains of opium, or one grain of morphine, or two grains of codeine, or half a grain of heroin or sixty grains of chloral hydrate, except upon the written order of the prescriber for each and every subsequent compounding or dispens-



ing. No copy or duplicate of such written order or prescription shall be made or delivered to any person, but the original shall at all times be open to inspection by the prescriber and properly authorized officers of the law; provided that the above provisions shall not apply to preparations sold or dispensed without a physician's prescription, containing less than two grains of opium, or one-quarter grain of morphine or one-half grain of codeine, or one-sixth grain heroin, or ten grains chloral hydrate in one fluid ounce, or, if a solid preparation, in the avoirdupois ounce; and provided further, that the above provisions shall not apply to sales at wholesale by jobbers, wholesalers and manufacturers to pharmacies, as defined in section one of an act entitled: "An act to regulate the practice of pharmacy in the State of California and to provide a penalty for the violation thereof; and for the appointment of a board to be known as the California State Board of Pharmacy, approved March 20, 1905, and acts amendatory thereof"; or physicians, nor to each other, nor to the sale at retail by retail pharmacies, to physicians, dentists, or veterinary surgeons duly licensed to practice in this state.

It shall be unlawful for any practitioner of medicine, dentistry or veterinary medicine to furnish to or to prescribe for the use of any habitual user of the same, any cocaine, opium, morphine, codeine, heroin, or chloral hydrate, or any salt, derivative or compound of the foregoing substances, or any preparation containing any of the foregoing substances or their salts, derivatives or compounds, and it shall also be unlawful for any practitioner of dentistry to prescribe any of the foregoing substances or their salts, derivatives or compounds, and it shall also be unlawful for any practitioner of dentistry to prescribe any of the foregoing substances for any person not under his treatment in the regular practice of his profession, or for any veterinary surgeon to prescribe any of the foregoing substances for the use of any human being; provided, however, that the provisions of this section shall not be construed to prevent any duly licensed physician from furnishing or prescribing in good faith for the habitual user of any narcotic drugs who is under his professional care, such substances as he may deem necessary for their treatment, when such prescriptions are not given or substances furnished for the purpose of evading the purposes of this act.

Sec. 5. Section nine of said act is hereby amended so as to read as follows:

Section 9. The sale or furnishing of carbolic acid (phenol) in quantities of less than one pound is prohibited unless upon the prescription of a physician, dentist or veterinary surgeon duly licensed to practice in this state; but this provision shall not apply to solutions of carbolic acid (phenol) containing not over ten per cent of the carbolic acid (phenol) and not less than ten per cent of ethyl alcohol. All sales of carbolic acid (phenol) thus diluted with water and ethyl alcohol so as to contain not more than ten per cent of carbolic acid (phenol) can be made under the same conditions as the drugs enumerated in schedule "B" as found in section seven, but sales of carbolic acid (phenol) containing more than ten per cent of said acid shall be registered subject to the same regulations as the poisons enumerated in schedule "A" as found in section 7.

#### CHICAGO COLLEGE OF PHARMACY

The School of Pharmacy of the University of Illinois (Chicago College of Pharmacy) held their commencement exercises on April 29th, when fifty-nine men and two women received the degree of Graduate in Pharmacy, this being the largest graduating class in the history of the college. The Biroth prize was awarded to William Ernst Ploetz, the Becker prize to Harry Aloys Underiner, the membership in the A. Ph. A. to Frederick Louis Fraunhoff and Charles Shpisman. Other honor men were Schuyler Van Rensselaer Gross, Charles Patt Eck, Edward George Fingly and Charles Stulcik. There is a noticeable absence of Anglo-Saxon, Celtish and Scotch names from the honor roll. Apparently German parentage is a large factor in the contest for honors in the Windy City.

#### AMERICAN MEDICO-PHARMACEUTICAL LEAGUE

Twelfth annual convention Monday, May 24, 1909. Members or non-members desiring to read papers at this convention are invited to forward the titles. Membership dues, \$2 per annum. All reputable physicians, pharmacists and dentists are eligible. Eugenie R. Eliscu, M. D., Secretary and Treasurer, New York City. Samuel F. Brothers, Ph. G., M. D., Executive Member, Brooklyn, N. Y.



**N. A. PELLERANO**

N. A. Pellerano, a prominent pharmacist of San Jose, has been engaged in the drug business for over sixteen years. For some years he was employed as clerk for Charles W. Fischer, who afterwards took him into partnership. When Mr. Fischer's health began to fail, Mr. Pellerano bought out his interest and since that time has owned and conducted the elegant pharmacy on South First street by himself.

Mr. Pellerano is a popular man, his genial manners and disposition securing him a host of friends. He is a member of the California and American Pharmaceutical Associations.



**STORE OF N. A. PELLERANO, SAN JOSE**

The California Promotion Committee are arranging for a special train to Seattle, leaving San Francisco on the evening of Saturday, June 12th, to carry one hundred representative Californians to the Alaska-Yukon-Pacific Exposition.

Stranger—My friend, why are you swearing so?

Cussity—Why? Because a doctor gave me some pills for a pain in the back, and the directions read, "Take one a half hour before you feel the pain coming on."—**Harper's Weekly.**



## Book Reviews

**Practical Bacteriology, Blood Work and Animal Parasitology**, by E. R. Stitt, Surgeon U. S. Navy. XI + 294 octavo pages, with 86 illustrations. P. Blakiston's Son & Co., Philadelphia.

We believe that text-books are improving from decade to decade. We also believe that qualified writers of text-books are rapidly crowding out those that are not qualified. Both statements are forcibly argued in the small, modest book before us. Not only is the author fully qualified as to education, but he has been thoroughly taught in the school of practical experience. Combine the two in one man, and we have the essentials for the creation of a text-book which will be a factor in imparting valuable knowledge to others.

The book is primarily intended for students in colleges of medicine, especially valuable to those of the medical profession who may be brought in contact with the diseases peculiar to tropical and sub-tropical countries. It is surprising to find what a fund of information is condensed in so small a volume. The author proceeds with facts, omitting all useless introduction. There is no uncertainty in the statements made, no beating about the bush.

Part I treats of general bacteriology, preparation of culture media, staining, etc., Part II is a study of the blood, Part III treats of animal parasitology, and Part IV treats of clinical bacteriology and animal parasitology of the various organs and tissues. In brief the work appears to be almost ideally perfect as a text-book for students of medicine. Its many good qualities cannot even be enumerated in this brief mention. The author is to be congratulated. Paper and binding (flexible cover) excellent.—A. S.

**The Art of Capsulating**, by H. R. Planten. This little monograph gives an interesting history and description of the processes that have been employed from time to time in the placing of oils, balsams and other medicines into capsules for more agreeable administration. For many years the old saying, "They do these things better in France," was literally true of gelatin capsules, and those who care to read the story showing how we have borrowed from the French in this matter will find much pleasure in a perusal of this little brochure. Published by H. Planten & Son, Brooklyn, N. Y.

### **Saunders' Pocket Medical Formulary**

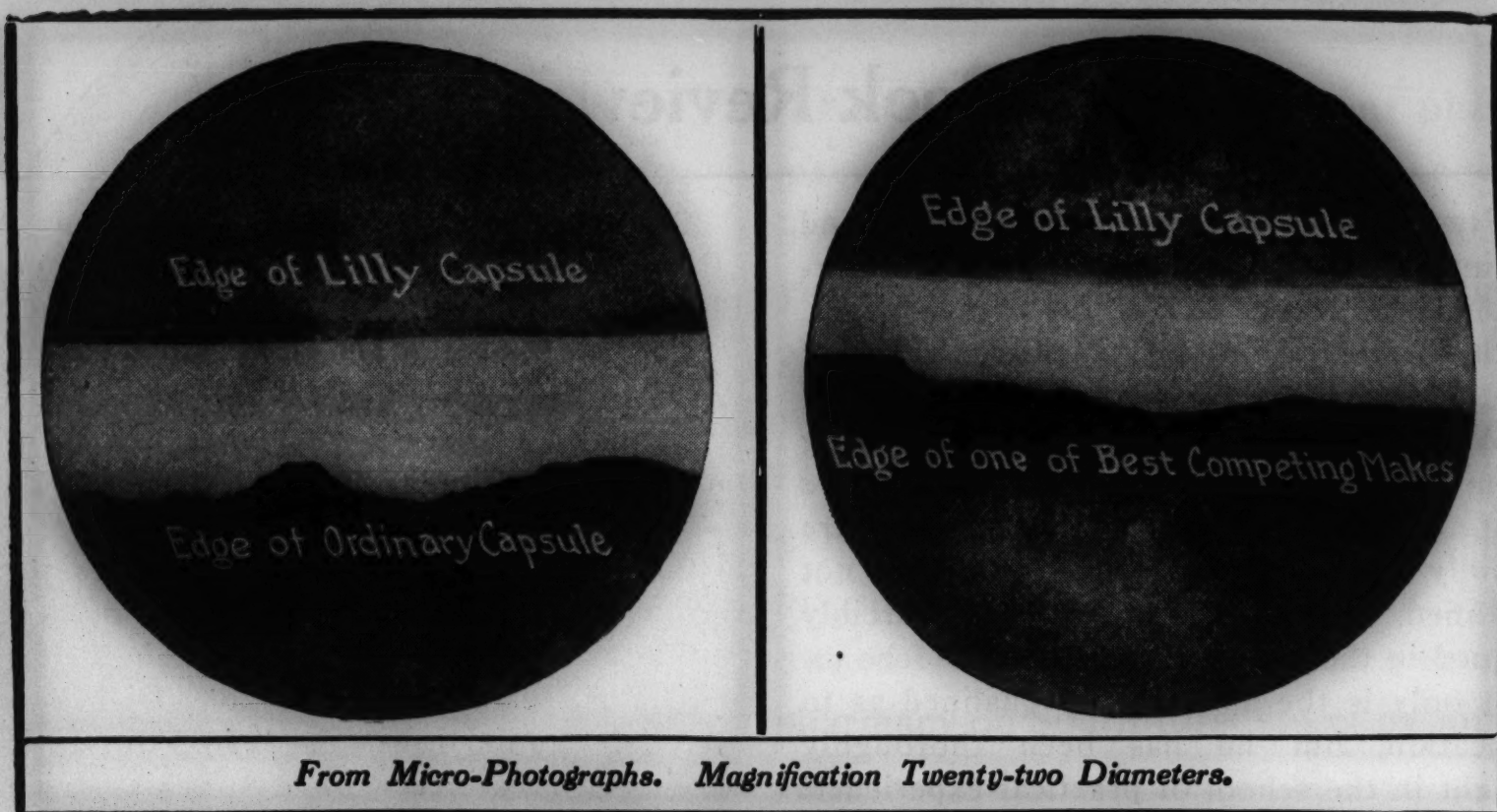
New (ninth) edition, adapted to the 1905 Pharmacopœia (eighth revision).

Sanders' Pocket Medical Formulary. By William M. Powell, M. D., author of "Essentials of Diseases of Children." Containing 1,831 formulas from the best known authorities. With an appendix containing Posologic Tables, Formulas and Doses for Hypodermic Medication, Poisons and their Antidotes, Diameters of the Female Pelvis and Fetal Head, Obstetric Table, Diet-lists, Materials and Drugs Used in Antiseptic Surgery, Treatment of Asphyxia from Drowning, Surgical Remembrancer, Tables of Incompatibles, Eruptive Fevers, etc., etc. Ninth edition. Adapted to the 1905 Pharmacopœia. Philadelphia and London: W. B. Saunders Company, 1909. In flexible morocco, with side index, wallet and flap, \$1.75 net. W. B. Saunders Company, Philadelphia-London.

This is a very handy pocket volume, and will be found to be a great convenience to the busy practitioner. It contains a large number of formulas and prescriptions for almost every ailment or unhealthy condition known in medical practice. They have been judiciously selected from various sources, such as hospitals, medical journals, physicians, etc., the source being given in each case, all arranged under the headings of the various ailments, and therefore easy to be referred to. Spaces are left for the insertion of additional prescriptions, etc.

The **Liquid Carbonic Company** has bought fifty-six acres of land in the heart of the West Side of Chicago, bounded by the Chicago River, Kedzie Avenue and Thirty-first Street. Ground will soon be broken on this tract for a new plant for the Liquid Carbonic Company. This plant will include a soda fountain factory, carbonator factory and machine shop, carbonic acid gas factory, brass and iron foundries, marble yards and workshops, art glass studios, lumber yard and kilns, fruit and syrup laboratories, etc. The main building will be 1,000 feet long and seven stories high, built wholly from reinforced concrete, and having fifteen acres of floor space. Although the present plant of the Liquid Carbonic Company is by far the largest of its kind in the world, this new plant will greatly exceed even the present one, and it will consolidate into one premises three plants that are now widely apart.





## LILLY'S EMPTY CAPSULES.

¶ To make fine capsules the best material must be employed. For Lilly capsules we import the finest grade of French gelatin, obtained from unweaned calves, and free from the fatty matter which is always associated with gelatin made from older animals which have fed on grain or forage.

¶ This gelatin is exceedingly clear and will remain so indefinitely giving a capsule of unusual brilliancy and transparency. Being free from fatty matter, it produces a capsule of very high solubility also, an important advantage from a therapeutic standpoint.

¶ Our capsules are molded on pins of phosphor-bronze, a metal which takes a high polish and is very resistant to the corrosive action of moisture. These pins are of special design and great accuracy so that they produce capsules of unvarying dimensions which makes joining of the cap to the body easy, yet a tight and perfect closure results.

¶ The capsules are not cut until they are dry and firm so that they have perfectly smooth, even edges, free from ragged projections noticed on all other makes. True edges are an advantage in many ways, the danger of splitting is largely eliminated; again, filling and joining are more easy and rapid, a point appreciated by the prescription clerk. In filling, the smooth edges do not permit the contents to adhere to the exterior to render the capsule unsightly and nauseous, as in the case of the ragged edge capsule.

¶ All Lilly capsules are carefully inspected and sorted, and you will find no waste or scraps in the boxes. The counting is by machine so that invariably you get full measure and exactly what you pay for—the finest capsules that can be made.

¶ There are no secrets in making Lilly empty capsules; their superior qualities depend solely upon the use of the finest material, the most improved machinery and the closest attention to every detail of manufacture.

¶ Send for free package and try them at your prescription case.

¶ Specify Lilly empty capsules on your drug order through the jobber; they are the finest capsules on the market today.

## ELI LILLY & COMPANY

INDIANAPOLIS

NEW YORK

CHICAGO

ST. LOUIS

KANSAS CITY

NEW ORLEANS



## Personals

### CALIFORNIA

**B. F. Crews**, who was formerly in the drug business at Monrovia, has decided to re-enter the trade at the same place. He has leased a store in the new McKee block and will open as soon as the building is ready.

**John E. Davis and D. Tracy Davis** of Holtville, who were in the drug business in New Jersey for nearly twenty years, have bought the store of Helms & Pellett at El Centro. They are preparing to increase the stock considerably.

**E. A. Test** opened his new store at Tulare on May 1st.

It is understood that **Edward J. Smith**, former Tax Collector of San Francisco, will engage in the retail drug business in this city.

The **San Bernardino Drug Company** of San Bernardino has installed a new ice cream and soda fountain, and is now in the midst of the real summer season.

The **Upland Pharmacy** of Upland has installed a new soda fountain and has put in a special department for ice cream, soda and candy.

**Erle L. Lloyd**, the efficient clerk with C. L. Barrington, San Jose, was united in marriage to Miss Freda Rehn of 416 Capp Street, San Francisco.

The stockholders of the recently incorporated **Bowman's Drug Store** of Fortuna have elected officers as follows: R. H. Bowman, president; R. A. Derrick, vice-president, and H. G. Chapman, secretary and treasurer.

The **Hamilton Pharmacy** have opened an attractive new drug store on Fourth Street, between Spring and Broadway, Los Angeles.

The contract has been let for the changes and improvements to be made on the corner section of the Pioneer Hotel at Porterville, in which the new **Canty Drug Store** will be located.

**George S. Kirby** of Salt Lake, Utah, has bought the Union Drug Store at Nevada City from H. L. Huntington.

**J. H. McCracken** of Dinuba has about completed the transfer of his stock and fixtures to his new store in that place.

**Philip & Philip** of Fruitvale have opened another store at the neighboring village of Dimond.

The **San Jacinto Drug Store** of San Jacinto has been enlarged by the annexation of an adjoining room, and the whole has been remodeled and supplied with new fixtures and a new interior finish.

**B. A. Black**, formerly of Berkeley, has leased a new building to be erected on Kentucky Street, Vallejo, where he will soon open a drug store. Report also has it that Mr. Black will open a store at Petaluma.

The store of the **Robbins-Claubes-Byrd Drug Company** at Porterville has been remodeled. The soda and cream department has been enlarged to make room for the summer rush.

**J. G. Vance**, formerly of Seventh and Figueroa Streets, Los Angeles, held a formal opening of his new store at Eighth and Spring Streets on April 17th. Music, floral decorations and other attractions brought a large number of visitors to the store.

The new revolving electric sign of the **Hamilton Pharmacy** at Fourth and Spring Streets, Los Angeles, is proving quite an attraction to the public of that city.

**C. R. Fitzell** of Eureka has just returned from a five weeks' trip into the great northwest, passing through the states of Oregon, Washington, British Columbia and Alberta, visiting over 250 towns, calling upon most of the druggists en route. He found no special improvements in the management of drug stores or the methods of business over those of California. He is satisfied that his home city of Eureka is quite up-to-date and as progressive in matters relating to pharmacy as any of the cities he visited. Mr. Fitzell is very popular in Eureka, having succeeded to the business of his father-in-law, F. A. Weck, who was the first to establish a drug business in Eureka.

The **M. & L. Drug Company** of Twenty-fourth and Vermont Streets in the University section of Los Angeles has added a root beer fountain to its soda and ice cream department.

The **Young Drug Company** of Petaluma, Cal., has leased new quarters at the corner of Kentucky and Washington Streets. These will be remodeled and fitted for occupancy by the first of August. The company will also open a branch store on Lower Main Street, Petaluma, in the near future.



**The Hixson Pharmacy** at Fifth and Pine Streets, Long Beach, is being remodeled and improved.

**Downer Brothers** of Pinole have opened a new drug store at Marysville.

**Sanborn Brothers'** successors have been incorporated at Los Angeles with a capital stock of \$250,000. The incorporators are Minnie H. Sanborn and F. A. Sanborn of Mexico, F. A. Sanborn of Los Angeles, E. R. Osborn and C. S. Tappan.

**The Hotel Alexandria**, Los Angeles, has been selected as the official headquarters of the August conventions of the California Pharmaceutical Association and the American Pharmaceutical Association to be held in Los Angeles.

**F. W. Carlisle** has sold the Wilmington Drug Store at Wilmington to E. O. Bailey of Los Angeles.

**Jas. L. DeMerville**, representative of the United Drug Company of Boston, spent the early part of April in Southern California visiting his trade.

The store of **Harry Dean** of Santa Ana is to be given a modern front of plate and prism glass.

**W. A. Bennetts**, who recently bought the Rauscher store at Laton, has installed a new soda fountain and fixtures.

**Geo. A. Taylor**, formerly of C. H. Nance & Co. of Los Angeles, has bought the Red Cross Pharmacy at Whittier.

**Arthur Hyer** late manager for J. J. January, Concord, is now with Philip & Philip, Fruitvale.

**Philip & Philip** have recently opened at Dimond, Alameda Co., a branch pharmacy, making three stores for them.

**H. L. Huntington**, Nevada City, has sold his drug store and intends locating elsewhere soon.

**W. W. Keim**, 1822 W. Washington Street, Los Angeles, has a partner. The firm is now Keim & Neill.

**R. W. Swanton**, Ph. C., C. C. P., '07, is now associated with J. Lee Brown, Ph. G., C. C. P., '03, in the Brown Drug Co. at Marshfield, Oregon. They have made extensive improvements in their store, and it will now compare favorably with the best metropolitan pharmacies in appearance and completeness of stock. The salesroom and prescription room are admirably adapted to the purpose. They have installed an analytical laboratory, the only one in their part of the country, and are rapidly becoming the professional store of their city.

**Miss Lulu McDanials**, clerk in Munson's photo department, spent May day at the big celebration at Los Gatos.

**C. E. Anderson**, of Cambria, has sold out to **W. M. Lyons**. Mr. Anderson will shortly visit his old home in Sweden, and on his return will look for another location.

**N. F. Sellgren** succeeds Smith's Drug Store at Templeton.

#### SAN FRANCISCO

**The World Drug Co.** intend opening another new store in the building just about being completed on the corner of Fifth and Market Streets.

**Louis Aguirre**, for some time past city salesman for Langley & Michaels Co., has resigned, with the intention of associating himself with the Donlon Tamm Drug Co., Sutter and Fillmore Streets.

**R. B. Fleet**, who has been covering the northern section of the city for the Langley & Michaels Co., succeeds Mr. Aguirre in the Mission district.

**Ruppert Fox**, for several years past engaged in office work with Langley & Michaels Co., succeeds Mr. Fleet in the northern section as city salesman.

**Dr. A. G. Meyer** succeeds the Reliable Drug Co. at Twenty-second and Howard Streets. The name will be continued as heretofore.

**McPike Drug Co.** have opened their fourth store at 289 Eighth Street.

**W. I. Moore**, of the Moore Drug Co., and **Mr. Powell**, of Redding, have leased a store on Market Street, opposite Fifth, and will open shortly. An up-to-date stock will be installed. Both these gentlemen are hustlers and should get their share of the business. The business will be conducted under the name of the Red Raven Pharmacy.

**L. P. Player**, of Modesto, was in town recently.

**R. L. Prouty**, Tonopah, Nev., is contemplating a vacation in the northern part of our State.

**Downer Bros.** will shortly open at Marysville with a new stock.

**C. H. Dietz** lately dropped in town from Stockton, on a visit.

**J. W. Behrendt**, of the Arrow Pharmacy, Mission Street and Cortland Avenue, will soon establish a branch at Cortland Avenue and Bennington Streets.

**C. R. Knapp**, Grass Valley, was recently in the city.

**W. E. White**, Madera, was another visitor.

**F. C. Lackenbach** paid us a visit the other day. He expects to make his home in Sonoma County during the summer.

**Chas. K. Tuttle**, of Pacific Grove, was in the city on the 22d and 23d ult., on a business trip.



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**You Buy SUNDRIES. Why not from us?**

You will be welcome at OUR NEW QUARTERS, Cor. Fremont and Mission Sts., San Francisco

**We Are Growing  
Because**



**The Trade Recognizes that the  
Specialty Man is the Connecting Link between Manufacturer  
and the Retailer**

**We Have the Stock and Facilities**

**SERWE & PRIEN CO.**

LOS ANGELES: 310 South Los Angeles St.

SAN FRANCISCO: Cor. Fremont and Mission

SEATTLE: 411 Occidental Avenue



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**The Hotel Alhambra** been selected as the August convention of the Pharmaceutical Association of the American Pharmacists in Los Angeles.

**F. W. Carlisle** Drug Store at the corner of Los Angeles and

**Jas. L. DeMott** United Drug Company, early part of August, visiting his trade.

The store of **L. J. DeMott** to be given a new prism glass.

**W. A. Bennett** Rauscher store a soda fountain and

**Geo. A. Taylor** & Co. of Los Angeles, Cross Pharmacy

**Arthur Hyer** library, Concord, is Fruitvale.

**Philip & Philip** Dimond, Alameda, making three stores.

**H. L. Huntington** his drug store at where soon.

**W. W. Keim**, 18 Los Angeles, has now Keim & Neil

**R. W. Swanton** now associated with C. C. P., '03, in Marshfield, Oregon, extensive improvements it will now compare metropolitan pharmacy completeness of stock, prescription room, the purpose. The analytical laboratory, part of the count coming the professor

**Miss Lulu McDaniel** photo department, big celebration at Los Angeles

**C. E. Anderson** of Cambridge, Mass.



**J. G. Munson**, of San Jose, was in town on the 7th inst., partly on business and also to attend a meeting of the directors of the California College of Pharmacy.

**Baer Drug Co.**, 722 Market Street, are the first people to give an all-night service. They now are open all the time, and our old friend, Dr. Fred. Grazer, well known in the trade, has charge of the night business.

**Brenner Bros.**, two young men who have been employed in different stores here in the city for some length of time, have purchased from J. Isacson, the store on the corner of Geary and Octavia Streets.

**Davis Bros.**, Eddy and Leavenworth Streets, have sold their interest in the store to Mr. Foster, who for some time has been in the employ of the Owl Drug Co. The store will be known as Foster's Pharmacy.

**E. B. Jorgenson**, who, before the fire, was on the corner of Washington and Kearny Streets, has opened a very handsome new store at 644 Kearny, close to his former location.

The drug store that since the fire has been conducted under the care of the **Clara Barton Hospital**, has recently been closed up, many of the doctors who had offices in that immediate neighborhood having moved down town to the more modern office buildings in the neighborhood of Union Square.

**Dr. Simpson** has moved his store from Twentieth and Kentucky Streets to the corner of Twelfth and Folsom, where he has placed it in the management of Mr. Leddy. It will be known as St. Kathryn's Pharmacy.

**N. L. A. Cody**, of Merced, has been sojourning in and about San Jose for the past three weeks.

A new company, known as the **Palace Drug Company**, has leased a store on the Market Street frontage of the Palace Hotel for ten years at a total rental of \$90,000.

**Lengfeld's Pharmacy** has secured a lease on the four-story building to be erected by the Martin Sachs Company on the north side of Post Street, near Stockton Street.

#### OREGON

The **Ausplund Drug Company** has been incorporated at Portland with a capital stock of \$5,000, by A. A. Ausplund, H. H. Kuhn and Robert Barkman.

**Ernest Stolten**, a druggist of this place, has left for a visit with relatives and friends in Germany.

If you want to know how to "Make a Liquid Carbonator Pay Your Rent," write for a folder to the Liquid Carbonic Company, Chicago.

#### Drug Stores for Sale

**In San Francisco**—First-class drug store, clean stock, good business, \$4,000. Also others at \$2,500, \$3,000 and \$3,500. **Interior Stores**—Up-to-date store in Berkeley, \$4,500; **Sonoma**, \$4,500; **Lake County**, \$3,000; **Humboldt County**, \$1,300; **Pescadero**, \$2,000. **In Oregon**, good town, \$6,500.

We have a client who wants to exchange real estate for a drug store.

If you want to buy or sell a business, it will be to your advantage to communicate with us. We have had over fifty years' experience in the drug business in California. Reference: wholesale drug trade of the Pacific Coast.

THE F. A. WECK REALTY CO.,  
2510 Shattuck Ave., Berkeley, Cal.

**For Sale**—10 A. D. S., \$275; 1 A. D. S., \$30; Sanitol Chemical Co., \$4 per share.

**Wanted**—A. D. S., Sanitol, Allan-Pfieber Chemical Co., American Drug Fire Insurance Co. Name lowest selling price.

C. S. MATHER & SONS,  
125 La Salle St., Chicago, Ill.

**Splendid location** for a drug store in one of the rapidly growing outside districts in San Francisco. Will build to suit tenant. Apply office of this paper.

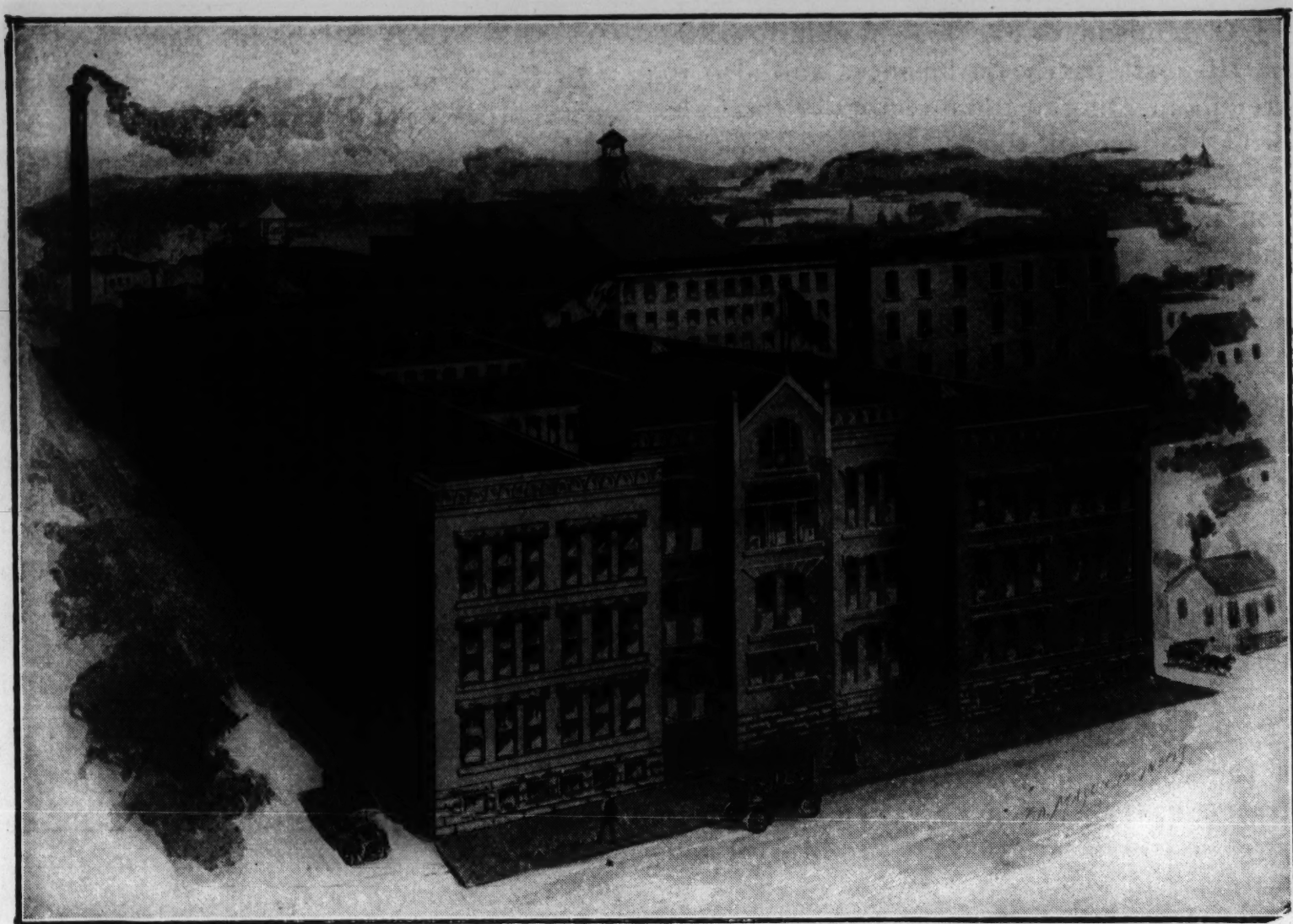
**Special Attention.**—The right way to buy a drug store—to sell one—to get a position or help, whether in the U. S. or Canada, is to write F. V. KNIEST, R. P., "The Drug Store Man," Omaha, Nebraska, U. S. A. Established 1904. Strictly reliable expert and confidential service.

**Pacific Coast Drug Agency**, established in 1897. Offers for sale and exchange drug stores in all the Pacific States and Territories. Partnerships negotiated; correspondence solicited; registered pharmacists with first-class credentials provided. All business strictly confidential. **G. M. Ludwig, Mgr.**, 239 Douglas Bldg., Los Angeles, Cal.

**Wanted Drug Clerk.**—Registered licentiate in California. Must be good prescription man, not addicted to drink or drugs. Must be honest and industrious. Address **Lichthardt's Pharmacy, Sacramento, Cal.**

**Prunoids** is the latest achievement in pharmaceutical chemistry. It is a delightful purgative and possesses the advantage of producing thorough evacuation of the bowels without the least danger of griping or creating intestinal irritation.





The plant of Eli Lilly & Co. shown in the accompanying engraving probably is the largest establishment in the United States today engaged exclusively in the manufacture of supplies for physicians' prescriptions.

The Lilly management believes that manufacturing a complete line of ethical pharmaceuticals demands all the skill and energy at the command of a single organization, and has adhered strictly to this policy, making its large growth and development wholly in the field of standard pharmaceuticals.

While the house of Lilly has been very conservative with respect to adhering to the one line, it has been very progressive in the matter of developing pharmaceutical manufacturing to a high degree of perfection, and in this it has given an excellent illustration of the fact that specialization on the part of an industrial organization leads to the same degree of exceptional proficiency as in the individual worker.

In the establishment and development of laboratories for chemical, physiological and botanical research and scientific supervision of manufacturing, they have been in the forefront for the past two decades. In 1884, Eli Lilly & Co. placed on the market a line of assayed and standardized fluid extracts, being the first house in the United States to offer assayed fluid representations of drugs under the name "**fluid extracts.**" Nearly twenty years ago the house established a well-equipped botanical department,

under the charge of a professional botanist, for the inspection of crude drugs, and since that date every lot of drugs employed in manufacture has had double botanical inspection, in addition to the chemical and physiological and assays required in the instance of very active drugs.

Besides the special laboratories for chemical, botanical and physiological work, separate departments are maintained for purely pharmaceutical investigations, supervision of goods in process and for the inspection of finished products. To the last-named laboratory, sample lots of all finished products must be sent for final inspection. An article, even though it has received the "O. K." of assayer and the departmental head where made, cannot be sent to the bottling or packaging department unless it has received approval in the final inspection laboratory.

A fine technical library in the charge of a trained librarian is maintained for the use of the scientific staff. The library contains the best modern texts and reference works on chemistry, botany, physiology, pharmacology, medicine and cognate sciences. It is especially rich in files of leading technical journals in the English, French and German languages.

Prominent features of the contributions of the Lilly laboratories to pharmaceutical advance are improvements in process of manufacture and rendering well-known drugs more palatable, more assimilable or convenient of administration.



The first pills with continuous gelatin coats were made in Lilly laboratories by a process originating there in 1879. Lilly specialties, such as Coco-Emulsion of Cod Liver Oil and Coco-Quinine, are examples of standard drugs which have been given a degree of palatability and convenience of administration heretofore unattained. Lilly's Lime for making lime water is illustrative of a great refinement of process and increase in efficiency in the making of a daily pharmaceutical requirement of the druggist and doctor. Liquid Blaud is an original, unique and effective form for the administration of the well-known carbonate of iron. Many other illustrations might be given showing that the efforts of the house of Lilly have not been directed so much toward the introduction of new remedies, of which we have so many, as toward the betterment and refinement of those which have long been used and recognized by physicians as agents upon which they can depend. The rapid growth of the business of this house makes necessary large increase in the laboratories at an early date, and plans have been approved for extensions of the plant, which include a fine scientific building, a new and commodious general office building and a separate warehouse for finished stock and shipping.

The well-known Lilly policy is one of the protection to all who are concerned in the distribution of pharmaceuticals, giving due recognition to the jobber, the retailer and the physician. It was framed fifteen years ago on the basis of distribution through the jobber to the retail trade, giving all retailers the same discount, 40 per cent, on their purchases through the jobber, irrespective of amount bought. This policy has been strictly adhered to throughout the United States without variation, and has met with general approval, as it has proven a convenience and saving to all, enabling them to buy according to their needs and make their pharmaceuticals a part of their general drug order through the jobber, and at the same time get the best discount.

The Lilly sales force covers the entire United States, and branches are maintained in New York, Chicago, St. Louis, Kansas City, New Orleans and an office in San Francisco. The full line is carried by practically every jobber in the United States.

The house, which was founded in 1876 by the late Colonel Eli Lilly, has made its growth on most substantial lines and wholly upon capital created out of the business, which places it in a position of great independence and security.



**Faith in the Future—Parke, Davis & Co.'s Addition to Their Detroit Plant**

Two and one-half acres of floor space, covering a ground area of something more than half an acre, are added to Parke, Davis & Co.'s Detroit laboratories in the completion of the handsome four-story-and-basement structure shown in the accompanying picture. This is the new home of the capsule, extract, chemical, printing, binding and paper-box departments, made necessary by the growing business of the company, which has advanced at such a pace that many departments were badly handicapped for want of room. With the exception of the scientific laboratory, erected half a dozen years ago, the new building is perhaps the most modern and substantial of all the structures that go to make up the firm's Detroit plant.

The St. Louis **Post-Dispatch** reports a case of recovery of a boy who was stated to be moribund from pneumonia, the recovery being due to the administration of **Stearn's Pneumolytic Serum**. The physician reporting the case says:

"This is the first instance I know of in St. Louis or the West in which a serum for the cure of pneumonia has been given such a severe test.

"Experiments with a serum for the cure of pneumonia were begun only two years ago in Detroit, and the serum slowly has advanced toward absolute efficiency. Even yet it has not been used with such frequency as to establish fully its worth.

"Pneumolytic serum is produced by the inoculation of healthy horses with the germs of pneumonia in series. When the horses show evidence of fever and their blood contains pneumonia germs, the serum is drawn from the blood and sterilized. Then ready for use. The value of the serum lies in the care with which it is made, and the methods of sterilization."



Druggists who wish a superior

# Cold Cream

Either under  
their own name or a stock label  
in jars or collapsible tubes

Should write for samples and prices to

## Henry K. Wampole & Co.

Incorporated

Manufacturing Pharmacists, Philadelphia, U. S. A.

### POWERS-WEIGHTMAN-ROSENGARTEN CO.

**P**

**CODEINE, ALKALOID AND SALTS**

**MORPHINE SULPHATE**

**POTASSIUM IODIDE**

**QUININE SULPHATE**

**MERCURIALS**

**STRYCHNINE**

**ACID CITRIC**

**W**

**BISMUTH SUBNITRATE**

**IODINE RESUBLIMED**

**GOLD CHLORIDE**

**IN HERMETICALLY SEALED GLASS TUBES**

**ETHER NITROUS CONCENTRATED**

**IN HERMETICALLY SEALED GLASS TUBES**

**R**

**ETHER FOR ANAESTHESIA**

**COMPLETE LIST ON REQUEST. SPECIFY "P-W-R"**

**NEW YORK**

**PHILADELPHIA**

**ST. LOUIS**



## PRICE LIST OF DRUGS, CHEMICALS, ETC.

These prices are submitted as ruling in the San Francisco market at time of publication, and are subject to fluctuation. Quotations are based on ordinary quantities, such as usually purchased by the average dealer. Containers are included unless otherwise indicated. See foot-note.

## THE MARKET

There are but few changes to note. While trading has not been very active during the past month, prices have been well maintained.

No change will be made in the tariff on essential oils, therefore an easier market is expected.

## PRICE CHANGES

| Advanced           | Declined        |
|--------------------|-----------------|
| Asafoetida         | Cantharides     |
| Flowers, chamomile | Camphor         |
| Ipecac             | Oil, Citronella |
| Silver Nitrate     | Oil, Bergamot   |
| Turpentine, Venice | Oil, Lemon      |
| Oil, Linseed       |                 |

|                                                 |    |
|-------------------------------------------------|----|
| ACETANILID, N. Y. Q., 1-lb. cart. incl....lb    | 37 |
| Powdr., N. Y. Q., 1-lb cart. incl.....lb        | 37 |
| ACETONE. Technical .....                        | 44 |
| ACID. Acetic No. 8, carboys.....lb              | 07 |
| 1-lb bottles, M. C. W.....                      | 20 |
| 5-lb bottles, " .....                           | 15 |
| Glacial, M. C. W. ....                          | 44 |
| Acetic, U. S. P. (Sp. gr. 1.028).....lb         | 24 |
| Arsenic, Hydrated Pure.....lb                   | 14 |
| Arsenous, Lumps, Pure .....                     | 24 |
| Arsenous, Powd., Pure, M. C. W.....lb           | 24 |
| Benzoic, from Toluol, M.C.W., 1-lb cart.incl lb | 55 |

|                                                |           |
|------------------------------------------------|-----------|
| Benzoic, from Toluol, M. C. W.....oz           | 12        |
| Benzoic, True from Benzoin.....lb              | 1 35-1 50 |
| Benzoic, from Toluene, 1-oz. cartons.....oz    | 10        |
| Benzoic, from Toluene, M. C. W.....lb          | 55-65     |
| Boracic .....                                  | 10-13     |
| Boracic, powd., M. C. W.....lb                 | 17        |
| Boracic, im. powd., M.C.W., 1-lb cart. incl.lb | 27        |
| Boracic, Squibb's, 1-lb bottle.....lb          | 45        |
| Boric, H. P. ....                              | 25        |
| Boric, powd., pure.....lb                      | 17        |
| Boric, Impalp., powd. ....                     | 27        |
| Butyric, 100% .....                            | 27        |
| Butyric, H. P. ....                            | 2 14      |
| Cacodylic, 1/8 .....                           | 4 00      |
| Camphoric .....                                | 36        |
| Carbolic, Calvert's No. 1.....lb               | 2 00      |
| Carbolic, Calvert's No. 2.....lb               | 1 50      |
| Carbolic, 1-lb tin, M.C.W., gilt label.....lb  | 22        |
| Carbolic, M.C.W., 5-lb can, gilt label.....lb  | 17        |
| Carbolic, M.C.W., 10-lb can, gilt label.....lb | 16        |
| Carbolic, M.C.W., 25-lb can, gilt label.....lb | 15 1/2    |
| Carbolic, Loose, crys., Merck's.....lb         | 70        |
| Carbolic Solution, 1-lb bot.....doz            | 2 64      |
| Carbolic, Crude .....                          | 40-50     |
| Chromic, 1-oz vials .....                      | 14        |
| Chrysophanic, true, M. C. W., 1-oz vials..oz   | 39        |
| Cinnamic .....                                 | 32        |
| Citric, crys. ....                             | 48-51     |
| Gallic, 1-oz cartons .....                     | 11        |
| Gallic .....                                   | 70        |
| Hydrobromic, conc., 1-oz vials, M.C.W...oz     | 17        |
| Hydrobromic, U. S. P., 10%, M.C.W.....lb       | 34        |
| Hydrocyanic, 1-oz vials, U.S.P., M.C.W..oz     | 10        |
| Hydriodic (Sp. gr. 1.50).....oz                | 42        |
| Hydriodic (Sp. gr. 1.70).....oz                | 52        |
| Hydrocyanic, U. S. P., Mallinckrodt's...lb     | 39        |
| Hydrocyanic, U. S. P., Scheele's.....oz        | 35        |
| Hydrofluoric, 1s, g. p. bots. incl., M.C.W..lb | 1 30      |
| Hydrofluoric, 1/2s, g. p. bots. incl. " ..lb   | 1 80      |
| Hydrofluoric, 1/4s, g. p. bots. incl. " ..lb   | 2 25      |
| Hydrofluoric, 1-oz g. p. bots. incl. " ..lb    | 37        |
| Hypophosphorous, 50%, 1-lb G. S. B. " ..lb     | 1 24      |
| Hypophosphorous, 50%, 1-oz G. S. B. " ..oz     | 19        |
| Lactic, conc., 1-oz vials, M. C. W.....oz      | 12        |
| Lactic, conc., 1s .....                        | 79        |
| Lactic, dilute, 1-oz vials, M. C. W.....oz     | 8         |
| Muriatic, carboys .....                        | 3         |
| Muriatic, 6-lb bots.....each                   | 75        |
| Muriatic, C. P., 6-lb bots.....lb              | 22        |
| Muriatic, C. P., 1-lb bots.....lb              | 35        |
| Nitric, carboys .....                          | 7         |
| Nitric, 7-lb bots.....ea                       | 1 10      |
| Nitric, C. P., 7-lb bots.....lb                | 25        |
| Nitric, C. P., 1-lb bots.....lb                | 35        |
| Nitro-Muriatic .....                           | 50        |

\*Articles quoted in this Journal as M. C. W. are the products of the Mallinckrodt Chemical Works.



|                                                  |      |       |                                           |     |       |
|--------------------------------------------------|------|-------|-------------------------------------------|-----|-------|
| Nitrous, fuming .....                            | lb   | 55    | Hydrated, pure, M. C. W.....              | lb  | 79    |
| Oxalic .....                                     | lb   | 12-14 | Metallic, M. C. W.....                    | oz  | 17    |
| Oxalic, chem. pure, M. C. W.....                 | lb   | 30    | Sulphate, pure, M. C. W.....              | lb  | 25-29 |
| Phosphoric, glacial .....                        | lb   | 64    | ALUMNOL .....                             | oz  | 50    |
| Phosphoric, syrupy (85%) .....                   | lb   | 55    | AMIDOL. 1-oz. can .....                   | oz  | 65    |
| Phosphoric, diluted, M. C. W.....                | lb   | 25    | AMMONIA. Spirits of .....                 | lb  | 75    |
| Phosphoric, M. C. W., U. S. P., 50%..            | lb   | 40    | Spirits of, aromatic .....                | lb  | 75    |
| Phosphoric, glacial, 1-oz vials.....             | oz   | 11    | Aqua, 26 deg., 1-lb bot.....              | lb  | 25    |
| Phosphoric, glacial, 1s, M. C. W.....            | lb   | 64    | Aqua, 26 deg., 4-lb bot.....              | lb  | 16    |
| Picric .....                                     | lb   | 60-70 | Aqua, 26 deg., 5 gal. can.....            | lb  | 10    |
| Pyrogallie, Resublimated, M. C. W.....           | oz   | 27    | Aqua, 26 deg., carboy .....               | lb  | 8     |
| Pyrogallie, 1-lb cans, W. C. W.....              | lb   | 2 15  | Aqua, Washing, 5-gal. can.....            | gal | 50    |
| Pyrogallie, ½-lb cans, M. C. W.....              | lb   | 2 25  | AMMONIUM. Acetate, cryst., M. C. W...oz   |     | 14    |
| Pyrogallie, ¼-lb cans, M. C. W.....              | lb   | 2 35  | Arsenate, 1-oz vials, M. C. W.....oz      |     | 22    |
| Pyroligneous .....                               | gal  | 40    | Benzoate, 1-oz vials, M. C. W.....oz      |     | 14    |
| Salicylic, 1-lb cartons .....                    | lb   | 46    | Benzoate, M. C. W. ....                   | lb  | 1 14  |
| Salicylic, from Oil Wintergreen.....oz           |      | 44    | Bichromate, 1-oz vials, M. C. W.....oz    |     | 14    |
| Salicylic, Amorph. ....                          | lb   | 46    | Bromide, 1-oz vials, M. C. W.....oz       |     | 12    |
| Succinic, oz bottles .....                       | oz   | 74    | Bromide, M. C. W.....                     | lb  | 40    |
| Sulphuric, Aromatic .....                        | lb   | 75    | Carbonate .....                           | lb  | 14-16 |
| Sulphuric, carboys .....                         | lb   | 1 ¾   | Carbonate, powdered .....                 | lb  | 20    |
| Sulphuric, 9-lb bottles .....                    | each | 1 00  | Chloride, see "Muriate."                  |     |       |
| Sulphuric, C. P., 9-lb bottles.....              | lb   | 20    | Citrate, 1-oz. vials, M. C. W.....oz      |     | 16    |
| Sulphuric, C. P., 1-lb bottles.....              | lb   | 35    | Hypophosphite, 1-oz vials, M. C. W.....oz |     | 20    |
| Sulphurous, U. S. P., solution.....              | lb   | 25    | Hypophosphite, M. C. W. ....              | lb  | 1 70  |
| Tannic, M. C. W., Regular .....                  | lb   | 85-90 | Iodide, 1-oz vials, M. C. W.....oz        |     | 34    |
| Tannic, U. S. P. ....                            | lb   | 1 10  | Muriate, lump. ....                       | lb  | 14-16 |
| Tartaric, crystallized .....                     | lb   | 38-44 | Muriate, gran. ....                       | lb  | 10-12 |
| Tartaric, powdered .....                         | lb   | 37-45 | Muriate, gran., pure, 1-lb cartons.....   | lb  | 20    |
| Tri-chlor-acetic .....                           | oz   | 32    | Muriate, powdered, pure.....              | lb  | 19    |
| Valerianic .....                                 | oz   | 25    | Muriate, Po .....                         | lb  | 17    |
| ACONITINE. Amorphous .....                       | dr   | 1 40  | Muriate, Po., Squibb's .....              | lb  | 35    |
| Cryst. ....                                      | dr   | 1 40  | Nitrate .....                             | lb  | 44    |
| ADAPES LANAE. B. P. ....                         | lb   | 30    | Oxalate .....                             | lb  | 49    |
| AGARIC. White. ....                              | lb   | 45    | Phosphate .....                           | lb  | 82    |
| ALBOLINE. ....                                   | lb   | 50    | Salicylate .....                          | lb  | 1 05  |
| 5-lbs .....                                      | lb   | 45    | Salicylate .....                          | oz  | 13    |
| Liquid .....                                     | lb   | 50    | Succinate .....                           | oz  | 1 00  |
| Liquid, 5-lbs .....                              | lb   | 45    | Sulphate, com'l .....                     | lb  | 10    |
| AGURIN .....                                     | oz   | 1 70  | Sulphate, C. P. ....                      | oz  | 29    |
| ALBUMEN. Egg. ....                               | lb   | 1 45  | Sulpho Cyanate, pure .....                | oz  | 12    |
| ALCOHOL. Absolute .....                          | qt   | 1 20  | Valerianate, cryst., 1-oz vials.....oz    |     | 25    |
| 94%, 10-gal, case .....                          | gal  | 2 94  | Valerianate, cryst. ....                  | lb  | 1 84  |
| 94%, 5-gal, case.....                            | gal  | 2 99  | AMMONOL .....                             | oz  | 1 05  |
| Denatured, 5-gal can .....                       | gal  | 70    | AMYL. Acetate .....                       | lb  | 79    |
| Wood, 5-gal case.....                            | gal  | 75    | Butyrate, M. C. W. ....                   | oz  | 30    |
| Wood, Columbian Spirits, 5 gal. in case.gal      |      | 1 02  | Nitrite .....                             | oz  | 29    |
| Wood, Columbian Spirits, barrels.....gal         |      | 85    | Valerianate, M. C. W. ....                | lb  | 2 59  |
| Wood, Columbian Spirits, ½ barrels....gal        |      | 90    | ANNATTO. Roll .....                       | lb  | 50    |
| 95%, 5 cents advance over price of Alcohol, 94%. |      |       | ANODYNE. Hoffman's, 1-lb bottle.....      | lb  | 75    |
| ALDEHYDE. Conct. ....                            | oz   | 25    | ANTHRASOL .....                           | oz  | 60    |
| ALLSPICE. . .                                    | lb   | 17    | ANTIFEBRIN .....                          | oz  | 17    |
| Powdered .....                                   | lb   | 20    | ANTI-KAMNIA and its combinations.....oz   |     | 1 00  |
| ALMOND MEAL .....                                | lb   | 40    | 10-oz lots for \$9.25; 25-oz for \$23.00  |     |       |
| ALMONDS. Bitter, shelled. ....                   | lb   | 45    | Tablets, Vest Pocket .....                | doz | 1 75  |
| Sweet, shelled. .                                | lb   | 45    | Tablets, Vest Pocket, 1 gross, 5% off.    |     |       |
| ALOIN. 1-oz vials .....                          | oz   | 12    | ANTIMONY. Black, powdered, pure.....lb    |     | 20    |
| ALUM. Ammonio-Ferric, M. C. W. ....              | lb   | 34    | Black, powdered, commercial .....         | lb  | 10    |
| Chrome .....                                     | lb   | 21    | Chloride, cryst., 1-oz vials.....oz       |     | 22    |
| Burnt .....                                      | lb   | 15    | Chloride, sol. (Butter of).....           | lb  | 40    |
| Ground .....                                     | lb   | 7-9   | Oxysulphuret (Kermes Mineral) .....       | lb  | 1 00  |
| Lump. . .                                        | lb   | 5-8   | Potassium Tartrate, M. C. W.....          | lb  | 45    |
| Powdered. . .                                    | lb   | 7-9   | Sulphuret, precipitated .....             | lb  | 92    |
| ALUMINUM. Aceto-Tartrate, M. C. W...oz           |      | 20    | ANTINOSINE .....                          | oz  | 2 10  |
| Bromide, M. C. W.....                            | oz   | 29    | ANTIPYRIN. Knorr's .....                  | oz  | 35    |
| Chloride, M. C. W.....                           | lb   | 79    | New .....                                 | oz  | 35    |
| Chloride, M. C. W.....                           | oz   | 14    | APIOL. Fluid Green .....                  | oz  | 35    |

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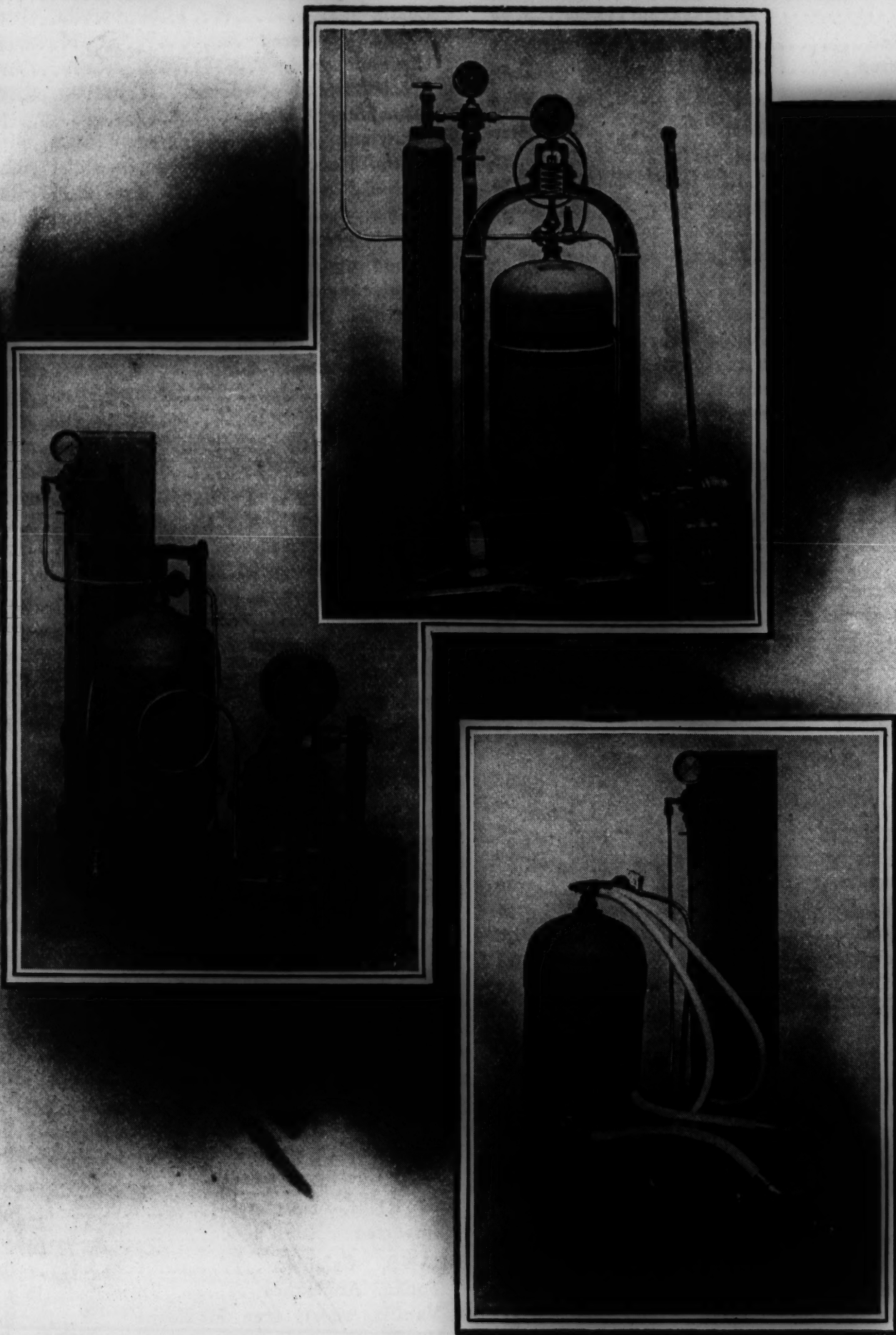


|                                                              |       |                                        |           |
|--------------------------------------------------------------|-------|----------------------------------------|-----------|
| APOLSYIN. S. & G. ....oz                                     | 65    | Canella, powdered .....lb              | 35        |
| APOMORPHINE. Hydrochlor. Amor.,                              |       | Cascara, Sagrada .....lb               | 12-14     |
| $\frac{1}{8}$ -oz vials .....oz                              | 2 85  | Cascara, Sagrada, powdered.....lb      | 18        |
| Mur. cryst., $\frac{1}{8}$ -oz.....oz                        | 10 40 | Cascarilla .....lb                     | 25        |
| Muriate, Amorphous, $\frac{1}{8}$ -oz vials, M.C.W.oz        | 2 00  | Cascarilla, powdered .....lb           | 30        |
| ARISTOL .....oz                                              | 1 80  | Cassia .....lb                         | 18-20     |
| ARGOLS. Red .....lb                                          | 15    | Cassia, powdered .....lb               | 25        |
| Red, powdered .....lb                                        | 20    | Cinchona, red. ....lb                  | 45-50     |
| ARGYROL .....oz                                              | 1 50  | Cinchona, red powdered. ....lb         | 45-50     |
| ARROWROOT. St. Vincent.....lb                                | 18-20 | Cinnamon, Ceylon. ....lb               | 40 50     |
| Taylor's Bermuda, $\frac{1}{4}$ s and $\frac{1}{8}$ s.....lb | 35    | Cinnamon, Ceylon, powdered. ....lb     | 40-50     |
| Taylor's Bermuda, bulk .....lb                               | 35    | Cotton Root, powdered. ....lb          | 35        |
| ARSENIC. Bromide, 1-oz vials, M. C. W..oz                    | 27    | Cotton Root, pressed, 1-lb.....lb      | 30        |
| Chloride, sol., M. C. W.....lb                               | 30    | Cramp, powdered .....lb                | 30        |
| Iodide, 1-oz vials, Merck's.....oz                           | 37    | Cramp, pressed, 1-lb .....lb           | 25        |
| Metallic .....lb                                             | 45    | Cundurango .....lb                     | 55        |
| Red, powdered .....lb                                        | 15    | Cundurango, powdered .....lb           | 60        |
| Solution (Donovan's) .....lb                                 | 40    | Dogwood, pressed, 1-lb.....lb          | 24        |
| Solution (Fowler's) .....lb                                  | 30    | Dogwood, powdered .....lb              | 30        |
| Sulphured, red powdered .....lb                              | 33    | Elder, pressed, 1-lb.....lb            | 35        |
| Sulphured, yellow powdered .....lb                           | 33    | Elm, select slabs .....lb              | 25        |
| White, lump .....lb                                          | 30    | Elm, ground, bulk .....lb              | 25        |
| White, powdered, commercial.....lb                           | 8-10  | Elm, powdered .....lb                  | 25        |
| Yellow (orpiment) .....lb                                    | 35    | Elm, powdered, $\frac{1}{4}$ s .....lb | 25        |
| ASBESTOS. Fibrous, gro.....lb                                | 20    | Elm, powdered, $\frac{1}{8}$ s .....lb | 30        |
| ASPARAGIN. $\frac{1}{8}$ -oz vials .....oz                   | 1 50  | Elm, powdered, oz.....lb               | 35        |
| ASPIRIN .....oz                                              | 43    | Hemlock, pressed, 1-lb. ....lb         | 25        |
| ATROPIA. Pure, $\frac{1}{8}$ -oz vials.....oz                | 7 25  | Hemlock, powdered. ....lb              | 30        |
| Sulphate, $\frac{1}{8}$ -oz vials .....oz                    | 6 25  | Jamaica Dogwood, pressed, 1-lb.....lb  | 35        |
| BALSAM. Copaiba, 8-lb can.....lb                             | 70    | Jamaica Dogwood, powdered, 1-lb.....lb | 35        |
| Copaiba, 5-lb bottle .....lb                                 | 70    | Mezereon, pressed, 1-lb.....lb         | 28        |
| Copaiba, 1-lb bottle .....lb                                 | 80    | Oak, red, pressed, 1-lb.....lb         | 22        |
| Copaiba, solidified .....lb                                  | 1 25  | Oak, white, powdered. ....lb           | 22        |
| Fir, Canada .....lb                                          | 75-80 | Oak, white, pressed, 1-lb.....lb       | 22        |
| Fir, Oregon .....lb                                          | 40-45 | Poplar, white, powdered, 1-lb.....lb   | 28        |
| Peru .....lb                                                 | 2 20  | Poplar, white, pressed, 1-lb .....lb   | 25        |
| Sulphur .....lb                                              | 60    | Poplar, yellow, pressed, 1-lb.....lb   | 25        |
| Tolu .....lb                                                 | 60    | Prickly Ash, powdered .....lb          | 40        |
| BARIUM. Acetate, 1-oz vials, M. C. W...oz                    | 16    | Prickly Ash, pressed, 1-lb.....lb      | 33        |
| Carbonate, M. C. W.....lb                                    | 37    | Quebracho .....lb                      | 35        |
| Carbonate, precip. ....lb                                    | 30    | Sassafras .....lb                      | 25        |
| Chloride, chemically pure, M. C. W.....lb                    | 33    | Sassafras, powdered .....lb            | 25        |
| Nitrate, M. C. W. ....lb                                     | 23    | Simaruba .....lb                       | 50        |
| Sulphide, commercial, M. C. W.....lb                         | 43    | Soap Tree .....lb                      | 12-15     |
| Sulphate, M. C. W., Tc.....lb                                | 13    | Soap Tree, ground.....lb               | 18        |
| Sulphate, M. C. W. ....lb                                    | 13    | Soap Tree, powdered .....lb            | 20        |
| BARK. Alder, black, pressed, 1-lb.....lb                     | 25    | Sumac, pressed, 1-lb.....lb            | 25        |
| Alder, red or tag, pressed, 1-lb.....lb                      | 24    | Tamarac, pressed, 1-lb .....lb         | 25        |
| Angostura .....lb                                            | 35    | Wahoo Root, pressed, 1-lb.....lb       | 33        |
| Ash, black, pressed, 1-lb.....lb                             | 20    | Wild Cherry. ....lb                    | 16        |
| Ash, mountain, pressed, 1-lb.....lb                          | 24    | Wild Cherry, ground. ....lb            | 18        |
| Ash, white, pressed, 1-lb.....lb                             | 25    | Wild Cherry, powdered .....lb          | 20        |
| Barberry, pressed, 1-lb.....lb                               | 30    | BAY RUM. Domestic .....gal             | 2 00      |
| Barberry, powdered .....lb                                   | 35    | Imported .....gal                      | 2 75      |
| Bayberry, pressed, 1-lb. ....lb                              | 25    | BEANS. Calabar. ....lb                 | 40        |
| Bayberry, powdered. ....lb                                   | 30    | Tonka, Angostura .....lb               | 1 40-1 60 |
| Birch, pressed, 1-lb.....lb                                  | 24    | Vanilla, short, true Mexican.....lb    | 5 50      |
| Black Haw, ground.....lb                                     | 35    | Vanilla, long, true Mexican.....lb     | 6 50      |
| Black Haw, pressed, 1-lb.....lb                              | 30    | Vanilla, Tahiti .....lb                | 1 20      |
| Black Willow, pressed, 1-lb.....lb                           | 25    | BEBEERINE. Pure, 1-oz vials .....oz    | 2 04      |
| Blackberry .....lb                                           | 25    | Sulphate, 1-oz vials .....oz           | 1 49      |
| Buckthorn, pressed, 1-lb .....lb                             | 25    | BENZOLE. Pure .....lb                  | 35        |
| Butternut, pressed, 1-lb .....lb                             | 25    | BENZINE. Gallon .....gal               | 30        |
| Calisaya, yellow, commercial.....lb                          | 30    | 5 and 10 gallons .....gal              | 25        |
| Calisaya, yellow, commercial, powd.....lb                    | 35    | Pints .....doz                         | 1 60      |
| Calisaya, East India. ....lb                                 | 42    | BERBERINE. Hydrochloride .....oz       | 2 55      |
| Calisaya, powdered. ....lb                                   | 45    | Sulphate .....oz                       | 2 29      |
| Canella .....lb                                              | 35    | BERRIES. Buckthorn .....lb             | 30        |
|                                                              |       | Cocculus Indicus .....lb               | 18        |

\*Articles quoted in this Journal as M. C. W. are the products of the Mallinckrodt Chemical Works.



## American Carbonators



A Carbonator reduces the cost of soda water to at least one-tenth. Even with a very moderate business it earns its cost in less than a season.

Sure of uniform and well charged water at all times.

No danger of running out of soda water in rush times, as when tanks are used.

The "RELIABLE" operates by water pressure.

The "Q. S." complete with motor, operates by electricity.

The "CARBOPHONE No. 3" with force pump, operates by hand.

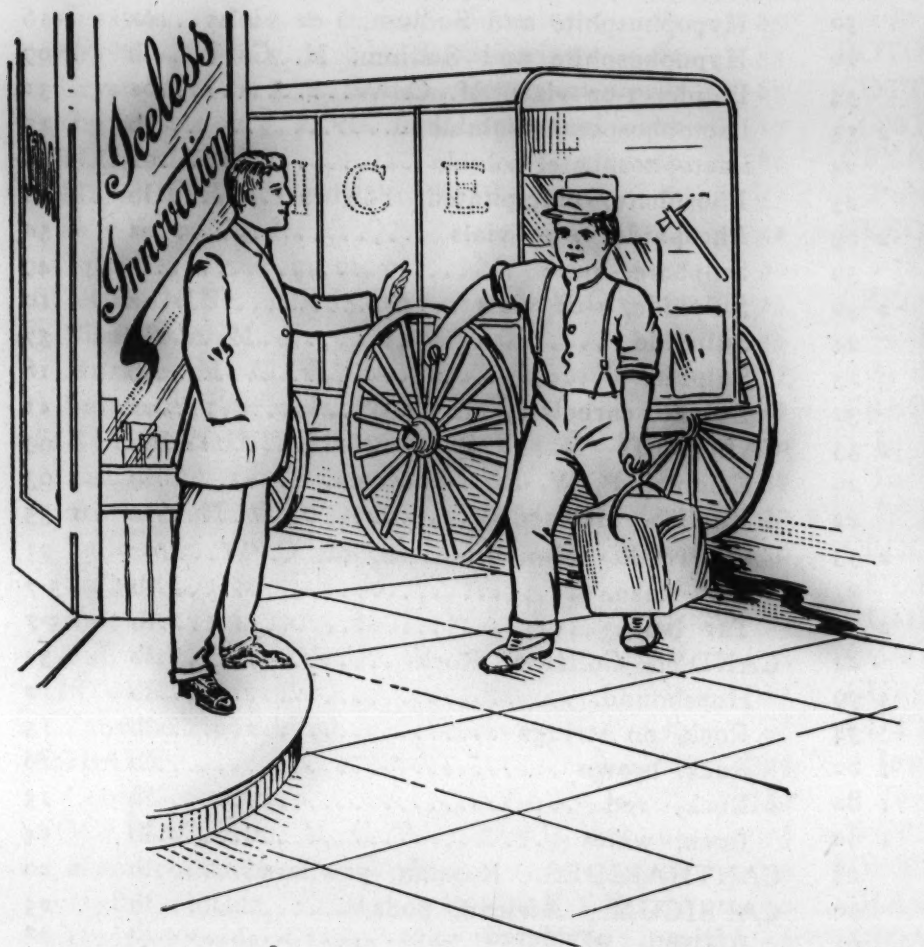
Send for photographs and descriptions. Lowest prices and most liberal terms.

**American Soda Fountain Co.** 282 Congress Street  
BOSTON, MASS.

G. J. BECHT, Pacific Coast Agency, 361 Ellis St., San Francisco, Cal.



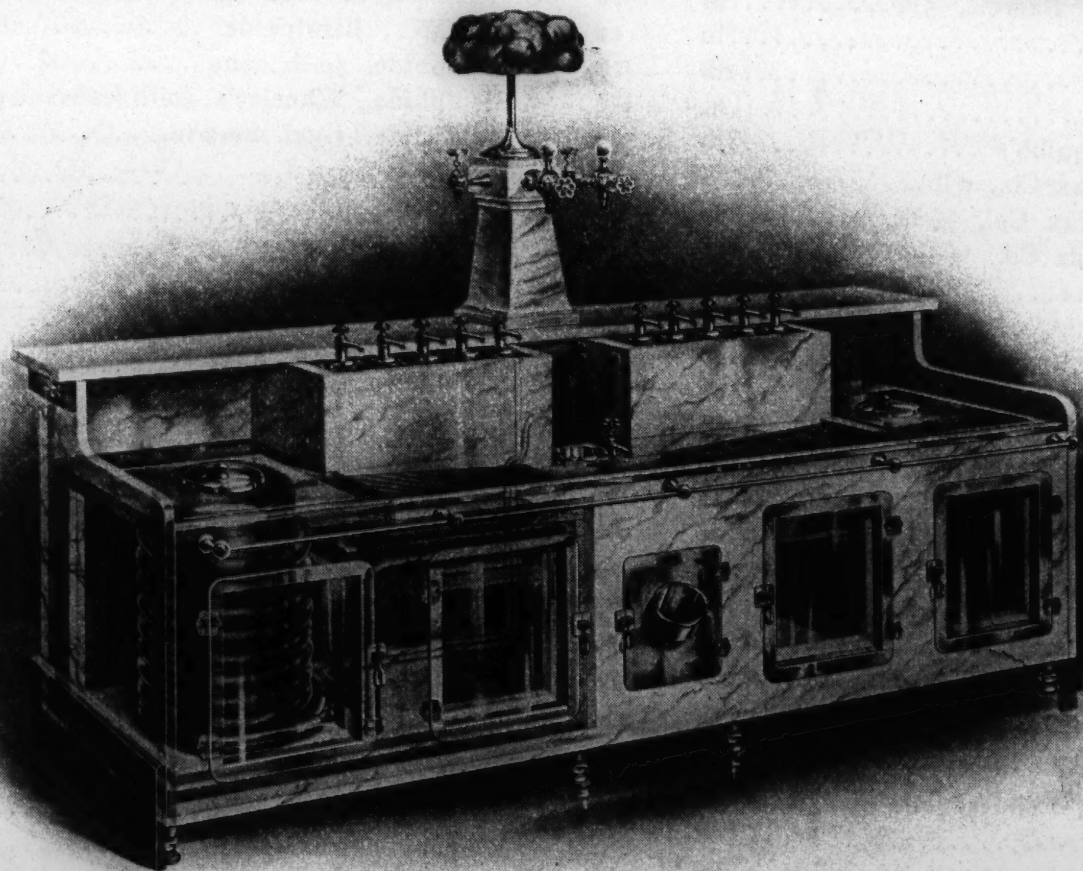
# "ICELESS" INNOVATION



The best "ICELESS" system, utilizing the freezing materials to the very utmost,—cooling the water to the draft tubes, cooling the syrups and the contents of the refrigerator chambers. No other system is as economical. Manufactured under the original patent, customers are thereby protected against the annoyances and dangers to which the users of infringing apparatus are liable.

Send for illustrated circulars containing description of the "ICELESS" Innovation.

Lowest Prices  
Easy Terms of Payment  
Liberal Allowance for  
Old Apparatus



## ADDRESS

**AMERICAN SODA FOUNTAIN COMPANY,**

282 Congress Street, Boston, Mass.

Warerooms: 27 S. Hanover St., Baltimore

299 Commerce St., Dallas

38 W. Alabama St., Atlanta

361 Ellis St., San Francisco

**G. J. BECHT, Pacific Coast Agency 361 Ellis St., San Francisco**



|                                              |       |       |                                               |       |
|----------------------------------------------|-------|-------|-----------------------------------------------|-------|
| Cubeb, stemless .....                        | lb    | 30    | CALCIUM. Bromide, 1-oz vials, M. C. W. ....oz | 11    |
| Cubeb, powdered .....                        | lb    | 35    | Bromide, M. C. W. ....lb                      | 64    |
| Elder .....                                  | lb    | 30    | Chloride, fused, M. C. W. ....lb              | 64    |
| Juniper, Italian .....                       | lb    | 10-12 | Chloride, granular, M. C. W. ....lb           | 30    |
| Poke .....                                   | lb    | 25    | Glycerolphosphate .....                       | 22    |
| Prickly Ash. ....                            | lb    | 40    | Hypophosphite, 1-oz vials. ....oz             | 14    |
| Sumac .....                                  | lb    | 25    | Hypophosphite. ....lb                         | 89    |
| Sumac, powdered .....                        | lb    | 30    | Hypophosphite and Sodium, 1-oz vials. ....oz  | 16    |
| BETOL .....                                  | lb    | 60    | Hypophosphite and Sodium, M. C. W. ....lb     | 1 09  |
| BISMUTH. Acetate, M. C. W. ....oz            | 34    |       | Iodide, 1-oz vials, M. C. W. ....oz           | 31    |
| Citrate, M. C. W. ....lb                     | 2 54  |       | Lactophosphate, soluble ....lb                | 1 25  |
| Citrate, M. C. W. ....oz                     | 24    |       | Lactophosphate, soluble ....oz                | 16    |
| Citrate and Ammonia, M. C. W. ....oz         | 25    |       | Phosphate, precipitated, 1-lb cart. ....lb    | 20    |
| Citrate and Ammonia, M. C. W. ....lb         | 2 69  |       | Phosphide, 1-oz vials ....oz                  | 50    |
| Lactate .....                                | oz    | 39    | Sulphate, pure ....lb                         | 49    |
| Metallic .....                               | lb    | 2 50  | Sulphide, 1-oz vials ....oz                   | 10    |
| Nitrate, M. C. W. ....oz                     | 24    |       | Sulphide ....lb                               | 37    |
| Oxide, Hydrated, M. C. W. ....lb             | 3 23  |       | Sulphite ....lb                               | 18    |
| Oxide Hydrated, M. C. W. ....oz              | 32    |       | Sulpho, carbolate, M. C. W. ....oz            | 11    |
| Oxychloride, Merck's ....lb                  | 2 33  |       | CALOMEL. N. Y. Q. ....lb                      | 1 03  |
| Salicylate, 40% ....oz                       | 20    |       | Calomel, P. W. R., 1-lb boxes. ....lb         | 1 03  |
| Salicylate, 64% Basic ....oz                 | 22    |       | English, Howard's ....lb                      | 1 35  |
| Salicylate, 64% M. C. W. ....lb              | 2 33  |       | CAMPHOR. Monobromated, M. C. W. ....oz        | 21    |
| Subbenzoate .....                            | oz    | 27    | Tar flake. ....lb                             | 5-7   |
| Subcarbonate .....                           | lb    | 2 32  | Tar balls. ....lb                             | 5-7   |
| Subgallate .....                             | oz    | 22    | CANDY. Coltsfoot Rock ....lb                  | 36    |
| Subiodide, M. C. W. ....lb                   | 3 99  |       | Horehound. ....lb                             | 12    |
| Subiodide, 1-oz vials, M. C. W. ....oz       | 34    |       | Rock, on strings ....lb                       | 15    |
| Subnitrate, M. C. W. ....lb                  | 1 82  |       | Rock, brown ....lb                            | 16    |
| Subnitrate, N. Y. Q. ....lb                  | 1 82  |       | Rock, red ....lb                              | 15    |
| Subnitrate, P. W. R. ....lb                  | 1 82  |       | Rock, white ....lb                            | 14    |
| Tannate, 1-oz vials, M. C. W. ....oz         | 24    |       | CANTHARIDES. Russian, powdered. ....lb        | 1 20  |
| Velerianate, 1/8s ....oz                     | 56    |       | CAPSICUM. African, pods ....lb                | 25    |
| BLUE MASS .....                              | lb    | 61    | African, powdered ....lb                      | 30    |
| Powdered .....                               | lb    | 64    | Bombay ....lb                                 | 20    |
| BLUE VITRIOL. Barrels, 5 1/4. ....lb         | 8-10  |       | CARAMEL. ....gal, \$1.25. ....lb              | 25    |
| Powdered .....                               | lb    | 12    | CARBON. Bisulphide ....lb                     | 30    |
| BOLE. Armenian ....lb                        | 18    |       | Bisulphide, 50-lb cans ....ea                 | 5 18  |
| BONE ASH .....                               | lb    | 6-8   | Bisulphide, Wheeler's 50-lb can. ....ea       | 5 18  |
| BORAX. C. P., Squibb's ....lb                | 33    |       | Bisulphide, 1-gal cans ....gal                | 1 43  |
| Pacific Coast Borax Co., 1-lb. ....doz       | 1 20  |       | CARMINE. No. 40 ....oz                        | 30    |
| Pacific Coast Borax Co., 1/4-lb. ....doz     | 90    |       | No. 40 ....lb                                 | 4 00  |
| Pacific Coast Borax Co., 1/4-lb. ....doz     | 48    |       | CASSIA FISTULA ....lb                         | 20    |
| Powdered .....                               | lb    | 8-10  | CASTOR FIBER. ....oz                          | 1 50  |
| Pure Granular ....lb                         | 25    |       | Castor Fiber, powdered ....oz                 | 1 75  |
| Refined .....                                | lb    | 8-10  | CERATE. Cantharides ....lb                    | 1 00  |
| BOROFORMOL. Pints ....doz                    | 7 50  |       | Goulard's, U. S. P. ....lb                    | 70    |
| BOROLYCEIDE Solution. ....lb                 | 60    |       | Resin, U. S. P. ....lb                        | 50    |
| BROMOFORM .....                              | oz    | 18    | Savin ....lb                                  | 60    |
| BROMINE .....                                | lb    | 83    | Simple ....lb                                 | 50    |
| Chloride, solution ....oz                    | 60    |       | Spermaceti ....lb                             | 70    |
| BRUCINE. 1/8-oz vials, M. C. W. ....oz       | 1 75  |       | Turner's ....lb                               | 60    |
| BRUCINE .....                                | oz    | 1 75  | Zinc, Carbonate, true ....lb                  | 60    |
| Phosphate ....oz                             | 1 75  |       | Zinc, Oxide ....lb                            | 60    |
| Sulphate, 1/8-oz vials ....oz                | 1 75  |       | CERIUM. Oxalate ....oz                        | 09    |
| BUDS. Balm of Gilead ....lb                  | 60    |       | Oxalate, 1-lb. cartons. ....lb                | 45    |
| Cassia ....lb                                | 40    |       | CHALK. Crayons, white ....lb                  | 15    |
| BUTTER CACAO. Ghirardelli ....lb             | 45-50 |       | French, cut ....lb                            | 18-20 |
| German ....lb                                | 50    |       | French, powdered ....lb                       | 5-8   |
| CADMIUM. Bromide, M. C. W. ....oz            | 18    |       | Precipitated, English ....lb                  | 10-12 |
| Iodide, M. C. W., 1-oz vials. ....oz         | 31    |       | Prepared in drops, bulk. ....lb               | 6     |
| Sulphate, M. C. W., 1-oz vials. ....oz       | 22    |       | Prepared in drops, 5-lb boxes. ....lb         | 8-9   |
| CAFFEIN. Bromide, 1oz vials. ....oz          | 36    |       | Prepared pink, 8-lb boxes. ....lb             | 10    |
| Citrated, M. C. W. ....oz                    | 27    |       | White, in lumps ....lb                        | 3-4   |
| Citrated, N. Y. Q. ....oz                    | 27    |       | CHARCOAL. Animal ....lb                       | 8-10  |
| Pure, N. Y. Q. ....oz                        | 36    |       | Willow, powdered ....lb                       | 10-12 |
| Sulphate, 1/8-oz vials, M. C. W. ....oz      | 65    |       | CHINA CLAY ....lb                             | 10    |
| Salicylate, true salt, 1/8s, M. C. W. ....oz | 65    |       | CHINESE SHAVINGS ....lb                       | 60    |
| CALAMINE .....                               | lb    | 18    |                                               |       |

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|                                                |           |       |                                             |     |       |
|------------------------------------------------|-----------|-------|---------------------------------------------|-----|-------|
| CHINOIDINE. 1-oz rolls .....                   | oz        | 12    | Nitrate .....                               | lb  | 54    |
| CHLORAL HYDRATE, CROTON, 1-oz vial             |           |       | Sulphate, C. P., granulated, 1-lb. boxes... | lb  | 23    |
| incl. ....                                     | oz        | 35    | Sulphate, Caustic Pencils .....             | doz | 1 75  |
| Crystals, M. C. W., 1s.....                    | lb        | 1 35  | Sulphate, purified, 1-lb cartons.....       | lb  | 23    |
| Crystals, M. C. W., ½s.....                    | lb        | 1 45  | COPPERAS. bbls 1¼.....                      | lb  | 3-4   |
| Crystals, M. C. W., ¼-lb cartons.....          | lb        | 1 55  | CORROSIVE SUBLIMATE, N. Y. Q.....           | lb  | 93    |
| Crystals, M. C. W., ozs.....                   | lb        | 2 55  | Powdered, N. Y. Q. ....                     | lb  | 96    |
| Crystals, 1-lb g. s. b. incl., Schering.....   | lb        | 1 45  | 1-lb boxes, P. W. R.....                    | lb  | 93    |
| Crystals, ½-lb g. s. b. incl., Schering.....   | lb        | 1 55  | COTON. Para, ⅛-oz.....                      | oz  | 14 00 |
| Crystals, ¼-lb g. s. b. incl., Schering.....   | lb        | 1 65  | COTTON. Negative, Anthony's Liq.....        | oz  | 1 00  |
| Crystals, 1-oz g. s. vls. incl., Schering..... | oz        | 17    | COWHAGE. 1-oz cans .....                    | oz  | 50    |
| CHLORALAMID .....                              | 25 gramme | 80    | CREAM TARTAR, pure, powdered.....           | lb  | 30-35 |
| CHLOROFORM. 1-lb tin, N. Y. Q.....             | lb        | 47    | Pure, powdered, 25-lb box.....              | lb  | 29    |
| In 7-lb. bottle, N. Y. Q.....                  | lb        | 42    | CREOLIN. ½-lb.....                          | doz | 4 00  |
| Squibb's, 1-500 gramme.....                    | ea        | 90    | 1-lb .....                                  | doz | 8 00  |
| CINCHONINE Alk'd pure 1-oz vials M.C.W.oz      |           | 25    | CREOSOTE. Beechwood .....                   | lb  | 89    |
| Bisulphate, M. C. W. ....                      | oz        | 18    | ½-lb .....                                  | lb  | 94    |
| Muriate, M. C. W.....                          | oz        | 17    | ¼-lb .....                                  | lb  | 1 00  |
| Sulphate, 1-oz vials, M. C. W.....             | oz        | 17    | CREOSOTE CARBONATE .....                    | oz  | 65    |
| CINCHONIDINE Alk. pure 1-oz v'ls M.C.W.oz      |           | 50    | In ¼-lb .....                               | lb  | 9 25  |
| Bisulphate, 1-oz vials, M. C. W.....           | oz        | 30    | In ½-lb .....                               | lb  | 9 10  |
| Muriate, M. C. W. ....                         | oz        | 32    | In 1-lb .....                               | lb  | 9 00  |
| Salicylate, 1-oz vials, M. C. W.....           | oz        | 34    | CROCUS MARTIS .....                         | lb  | 10    |
| Sulphate, 1-oz vials, M. C. W.....             | oz        | 28    | CUDBEAR .....                               | lb  | 30    |
| Sulphate, 5-oz cans, M. C. W.....              | oz        | 24    | CUMARIN .....                               | oz  | 45    |
| Sulphate, 1-oz vials, P. W. R.....             | oz        | 28    | CUMENE (Cumol) .....                        | lb  | 1 10  |
| CLOVES. Zanzibar .....                         | lb        | 25    | CURCUMA. Powdered .....                     | lb  | 16    |
| Zanzibar, powdered .....                       | lb        | 28    | CUTTLEFISH .....                            | lb  | 35    |
| COBALT .....                                   | lb        | 25    | Jeweler's .....                             | lb  | 85    |
| Cobalt, powdered .....                         | lb        | 30    | Powdered .....                              | lb  | 25    |
| COCAINE. Alk., M. C. W., 1-oz v'ls, incl. oz   |           | 4 75  | DATURINE. Alk., cryst., 5-gr.....           | ea  | 75    |
| Hydrochloride, M. C. W.....                    | oz        | 2 90  | DEXTRIN . . . . .                           | lb  | 10-15 |
| Hydrochloride Cryst., 1-oz v'ls, N.Y.Q. oz     |           | 2 90  | DIASTASE. of Malt .....                     | oz  | 80    |
| Hydrochloride Cryst., ½-oz. v'ls, N.Y.Q. oz    |           | 3 05  | DIGALEN. ½-oz bottles.....                  | ea  | 1 00  |
| Hydrochloride Cryst., ¼-oz v'ls, N.Y.Q. oz     |           | 3 15  | DIGITALIN. ⅛-oz vials .....                 | oz  | 5 75  |
| Hydrochloride Cryst., ⅛-oz v'ls, N.Y.Q. oz     |           | 3 30  | DIONIN. ⅛s. ....                            | oz  | 6 25  |
| Hydrochloride, 1-oz vials, P. W. R.....        | oz        | 2 90  | 15-gr vials .....                           | ea  | 35    |
| COCHINEAL. Honduras .....                      | lb        | 60    | DIURETIN . . . . .                          | oz  | 1 75  |
| Honduras, powdered. ....                       | lb        | 65    | DOVER'S POWDER, U. S. P.....                | lb  | 1 60  |
| CODEINE. N. Y. Q., pure.....                   | oz        | 4 70  | DRAGON'S BLOOD, Mass. ....                  | lb  | 50    |
| Muriate, N. Y. Q., ⅛s.....                     | oz        | 4 65  | Powdered .....                              | lb  | 70    |
| Phosphate, N. Y. Q., ⅛-oz vials.....           | oz        | 4 40  | Reed's. . . . .                             | lb  | 85    |
| Pure, M. C. W.....                             | oz        | 4 70  | DUBOISINE. Sulphate, 10-gr vial.....        |     | 1 10  |
| Sulphate, M. C. W.....                         | oz        | 4 45  | EARTH, Fuller's, powdered. ....             | lb  | 8-10  |
| Sulphate, 1-oz vials, P. W. R.....             | oz        | 4 45  | EIKONOGEN, lb, \$3.95; ½s, \$4.20.....      | oz  | 37    |
| COLLODION .....                                | lb        | 59    | ½s. . . . .                                 | lb  | 4 80  |
| 1-oz vials .....                               | doz       | 1 00  | ELATERIN. 15-gr vial .....                  |     | 1 25  |
| Cantharidal .....                              | lb        | 1 85  | ELATERIUM, ⅛-oz vials.....                  | oz  | 2 25  |
| Cantharidal, 1-oz vials .....                  | doz       | 1 75  | EMERY. Flour .....                          | lb  | 8-10  |
| Flexible .....                                 | lb        | 64    | Grain .....                                 | lb  | 8-10  |
| Flexible, 1-oz vials .....                     | doz       | 1 00  | EMETIN (Resinoid) .....                     | oz  | 7 53  |
| COLCHICINE. Cryst., 15-grain.....              | gr        | 14    | (Alkaloid), pure, 15-gr vial.....           |     | 1 25  |
| C. P., Amorph., 15-grain vials.....            | gr        | 30    | ERGOT. Spanish. . . . .                     | lb  | 65    |
| COLOCYNT. Apples, Trieste.....                 | lb        | 60-65 | Spanish, powd.....                          | lb  | 65    |
| Apples, powdered .....                         | lb        | 75    | ERGOTIN. Bonjean .....                      | oz  | 36    |
| COMPOSITION POWDER, 2-oz papers..              | lb        | 35    | ERGOTOLE. S. & D.....                       | doz | 4 50  |
| CONFECTION. Aromatic .....                     | lb        | 1 00  | ESERINE (Physostigmine), 5-gr Alkaloid..    | gr  | 13    |
| Opium .....                                    | lb        | 1 50  | Sulphate, 5-gr vials .....                  | ea  | 50    |
| Rose, U. S. P. ....                            | lb        | 65    | Sulphate, 10-gr vials .....                 | ea  | 1 00  |
| Senna, U. S. P. ....                           | lb        | 70    | Sulphate, 15-gr vials .....                 | ea  | 1 50  |
| Theriac .....                                  | lb        | 1 25  | ETHER. Acetic, M. C. W., 1-lb bot.....      | lb  | 55    |
| COPPER. Acetate, cryst., C.P., M.C.W.....      | lb        | 74    | Benzoic, 1-oz bot.....                      | oz  | 20    |
| Acetate, com'l, lump .....                     | lb        | 40    | Butyric, 1-lb bot.....                      | lb  | 1 25  |
| Acetate, Po. Verdigris .....                   | lb        | 45    | Chloric, U. S. P., M. C. W., 1-lb bot....   | lb  | 64    |
| Ammoniated .....                               | lb        | 59    | Chloric, concent., M. C. W., 1-lb bot....   | lb  | 74    |
| Arsenite, 1-oz vials, M. C. W. ....            | oz        | 19    | Formic, 1-lb bot. ....                      | lb  | 1 59  |
| Arsenite, 1-oz vials .....                     | oz        | 19    | Hydrobromic, 1-oz bot. ....                 | oz  | 29    |
| Bromide .....                                  | oz        | 32    | Nitrous, conc., M. C. W., ¼-lb bot.....     | lb  | 1 00  |
| Carbonate .....                                | lb        | 38    | Nitrous, conc., M. C. W., ½-lb bot.....     | lb  | 90    |

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|                                                |       |                                             |       |       |
|------------------------------------------------|-------|---------------------------------------------|-------|-------|
| Nitrous, conc., M. C. W., 1-lb bot.....lb      | 80    | GADUOL .....                                | oz    | 37    |
| Nitrous Spirit, 4-lb bot. ....lb               | 58    | GAMBIER .....                               | lb    | 10-12 |
| Sulphuric, U.S.P., Mallinckrodt's, 1-lb can.lb | 31    | GARANTOSE. 550 times sweeter than sugar.    |       |       |
| Sulphuric, U.S.P., Mallinckrodt's, 3-lb can.lb | 27    | 1-lb cans .....                             | lb    | 2 25  |
| Sulphuric, U.S.P., ¼-lb cans, P.W.R.....lb     | 50    | 1-oz cans .....                             | oz    | 20    |
| Sulphuric, U.S.P., 1-lb cans, P.W.R.....lb     | 31    | GELATIN. Cooper's, 12-lb case.....lb        |       | 65    |
| Sulphuric, washed, 1-lb bot.....lb             | 38    | Coxe's. . . . .                             | doz   | 1 50  |
| Sulphuric, Squibb's, in 1-500 gm cans, list.ea | 88    | French Pink. ....lb                         |       | 75    |
| Sulphuric, Squibb's, in 1-250 gm cans, list.ea | 48    | French Gold Label.....lb                    |       | 50    |
| Sulphuric, Squibb's, in 1-100 gm cans, list.ea | 22    | French Silver Label.....lb                  |       | 40    |
| Valerianic .....                               | oz    | 30                                          |       |       |
| ETHYL. Bromide .....                           | oz    | 20                                          |       |       |
| Chloride, 10-gramme tubes Bengue.....doz       | 4 75  | GLASS. Powdered. ....lb                     |       | 15    |
| Chloride, 30-gramme tubes Bengue.....doz       | 9 75  | Soluble. . . . .                            | lb    | 25    |
| Chlodire, 10 gramme .....                      | ea    | 40                                          |       |       |
| Iodide (see Hydriodic Ether).....oz            | 51    | GLUCOSE. 1-lb bot.....lb                    |       | 20    |
| EUCALYPTOL .....                               | oz    | 16                                          |       |       |
| EUCAINE. A or B, ⅛s.....oz                     | 3 60  | GLUE. Common. ....lb                        |       | 15    |
| EUDOXINE. . . . .                              | oz    | 2 10                                        |       |       |
| Tablets, 3-gr. . . . .                         | oz    | 2 60                                        |       |       |
| Tablets, 5-gr. . . . .                         | oz    | 2 50                                        |       |       |
| Tablets, 1-3 gr, ¼-oz bots.....oz              | 3 00  | White, No. 1. ....lb                        |       | 25    |
| EUKATROL, powd.....oz                          | 1 00  | GLUTOL .....                                | oz    | 65    |
| Tablets .....                                  | oz    | 1 00                                        |       |       |
| EUROPHEN. . . . .                              | oz    | 1 80                                        |       |       |
| EXALGINE .....                                 | oz    | 1 40                                        |       |       |
| EXTRACT. Licorice, Corigliano. ....lb          | 45    | GLYCERINE. Price's. ....lb                  |       | 70    |
| Licorice, Mellor & Rittenhouse.....lb          | 27-30 | Pure, in 10-lb cans.....lb                  | 20½   |       |
| Licorice, M. & R., 25 and 50-lb box....lb      | 26    | Pure, in 50-lb cans.....lb                  | 18½   |       |
| Licorice, soft, perf., clearly soluble.....lb  | 75    | GLYCEROPHOSPHATES. Iron .....               | oz    | 32    |
| Licorice, Y. & S.....lb                        | 27-30 | Lime .....                                  | oz    | 25    |
| Licorice, powd. . . . .                        | lb    | Potash .....                                | oz    | 20    |
| Logwood, bulk .....                            | lb    | Soda .....                                  | oz    | 20    |
| Logwood, ¼s. ....lb                            | 20    | GLYCYRRHIZIN. Ammoniated .....              | oz    | 25    |
| Logwood, ½s. ....lb                            | 18    | GOLD and Sod. Chlo., 15-gr v'ls, M.C.W..doz | 2 75  |       |
| Logwood, 1s. ....lb                            | 16    | And Sodium Chlor, 15-gr vials, P.W.R..doz   | 3 30  |       |
| Male Fern, U. S. P.....lb                      | 2 25  | Chloride, 15-gr vials, M. C. W.....doz      | 5 10  |       |
| Malt, dry .....                                | lb    | Chloride, 15-gr vials, P. W. R.....doz      | 5 10  |       |
| Witch Hazel .....                              | gal   | Mono-bromide, 15-gr vials.....ea            | 1 25  |       |
| Witch Hazel, 5-gal kegs, Dickenson's..gal      | 1 05  | Tri-bromide, 15-gr vials .....              | ea    | 1 00  |
| Witch Hazel, 10-gal kegs, Dickenson's..gal     | 1 00  | Tri-cyanide, 15-gr vials .....              | ea    | 2 00  |
| FAREOL. . . . .                                | oz    | 50                                          |       |       |
| FENETOLE .....                                 | lb    | 2 00                                        |       |       |
| FERRATIN. Powder or tablets.....oz             | 85    | GOOSE GREASE. . . . .                       | lb    | 60    |
| FLAKE WHITE. English. ....lb                   | 15    | GRAINS. Paradise. ....lb                    |       | 40    |
| FLOUR. Gluten. . . . .                         | lb    | Powdered. . . . .                           | lb    | 45    |
| Rice. . . . .                                  | lb    | 12                                          |       |       |
| FLOWERS. Althea. . . . .                       | lb    | 40                                          |       |       |
| Arnica .....                                   | lb    | 20-22                                       |       |       |
| Arnica, powd. ....lb                           | 25    | GUAIACOL. Carb. . . . .                     | oz    | 1 50  |
| Calendula, new .....                           | lb    | 90                                          |       |       |
| Chamomile, Hungarian .....                     | lb    | 45                                          |       |       |
| Chamomile, Roman .....                         | lb    | 35                                          |       |       |
| Elder .....                                    | lb    | 30                                          |       |       |
| Elder, pressed. ....oz                         | 25    | Merck's. . . . .                            | oz    | 18    |
| Kooso. . . . .                                 | lb    | 75                                          |       |       |
| Kooso, powd. . . . .                           | lb    | 80                                          |       |       |
| Lavender. . . . .                              | lb    | 35                                          |       |       |
| Mullein.....lb                                 | 1 00  | GUARANA. Powd. ....lb                       | 2 75  |       |
| Orange.....lb                                  | 1 10  | GUM. Aloes, Barbadoes .....                 | lb    | 60    |
| Poppy, red .....                               | lb    | 65                                          |       |       |
| Rose, red .....                                | lb    | 1 00                                        |       |       |
| Rosemary .....                                 | lb    | 30                                          |       |       |
| FLOUR SPAR. Powdered.....lb                    | 25    | Aloes, Barbadoes, powd. ....lb              | 65    |       |
| FORMALDEHYDE .....                             | lb    | 30                                          |       |       |
| 5-lb bot. ....lb                               | 25    | Aloes, Cape. . . . .                        | lb    | 20    |
| FORMALIN. S. & G. ....lb                       | 40    | Aloes, Cape, powd.....lb                    | 20-25 |       |
| FORMIN .....                                   | oz    | 15                                          |       |       |
|                                                |       | Aloes, Socotrine .....                      | lb    | 40    |
|                                                |       | Aloes, Socotrine, powd.....lb               | 45    |       |
|                                                |       | Ammoniac tears. ....lb                      | 40    |       |
|                                                |       | Arabic, Turkey, first pick.....lb           | 50    |       |
|                                                |       | Arabic, Turkey, second pick.....lb          | 40    |       |
|                                                |       | Arabic, Turkey, sifted sorts. ....lb        | 20    |       |
|                                                |       | Arabic, first pick, granulated.....lb       | 50    |       |
|                                                |       | Arabic, first pick, powd.....lb             | 45    |       |
|                                                |       | Asafoetida, Calcutta. ....lb                | 40    |       |
|                                                |       | Asafoetida, powd. ....lb                    | 45    |       |
|                                                |       | Asphaltum. . . . .                          | lb    | 15    |
|                                                |       | Benzoin, marble, select. ....lb             | 50    |       |
|                                                |       | Benzoin, powd. ....lb                       | 55    |       |
|                                                |       | Camphor, bulk .....                         | lb    | 63-66 |
|                                                |       | Camphor, 1-oz blocks.....lb                 | 65-69 |       |
|                                                |       | Camphor, 24 to lb.....lb                    | 65-69 |       |
|                                                |       | Camphor, powd. ....lb                       | 75    |       |
|                                                |       | Catechu, refined. ....lb                    | 18    |       |
|                                                |       | Catechu, powd. ....lb                       | 30    |       |
|                                                |       | Copal .....                                 | lb    | 40    |
|                                                |       | Damar. . . . .                              | lb    | 38    |
|                                                |       | Galbanum. . . . .                           | lb    | 1 00  |
|                                                |       | Gamboge . . . . .                           | lb    | 1 10  |
|                                                |       | Gamboge, powd. ....lb                       | 1 20  |       |
|                                                |       | Guaiac. . . . .                             | lb    | 35    |
|                                                |       | Guaiac, powd. ....lb                        | 40    |       |
|                                                |       | Kino, true. ....lb                          | 75    |       |
|                                                |       | Kino, true, powd.....lb                     | 80    |       |

\*Articles quoted in this Journal as M. C. W. are the products of the Mallinckrodt Chemical Works.



# WHAT THEY SAY ABOUT WALRUS SODA FOUNTAINS

Walrus Mfg. Co.,

Decatur, Ill.,

Gentlemen:—

I believe the Walrus Soda Fountain is the best Soda dispensing apparatus on the market. I had one in my other store, and I am glad that I got one for my new store. Refer any prospective buyers to me, or have them come and see the fountain. I will gladly recommend it.

Yours truly,

F. M. JOSEPH.

Walrus Mfg. Co.,

Decatur, Ill.,

Gentlemen:—

Having put the fountain to thirty days hard test, we are glad to recommend it, not only for its beauty and perfect workmanship, but we assure you that we are very much pleased that we can draw colder soda with our new apparatus than we could with the old fountain, and we do not have the ice man to contend with either. We believe that you have the only pump which does not drip. Please put us down as Walrus boosters.

Yours truly,

OPERA HOUSE  
DRUG CO.,

INTERIOR OF  
F. M. JOSEPH  
CONFECTIONERY  
1048 E. GARFIELD BLVD.  
CHICAGO ILLINOIS



Sioux City, Ia.

January 17, 1909.

Walrus Mfg. Co.,

Decatur, Ill.

Gentlemen:—

We have used a number of Soda Fountains, but have never had the satisfaction that we are getting with our new Walrus Fountain. We have had many compliments upon it. You will certainly get our future patronage.

Respectfully,

OLYMPIA CANDY CO.

Excelsior Springs, Mo.,

January 26, 1909

Walrus Mfg. Co.,

Decatur, Ill.

Gentlemen:—

After having investigated several different standard makes of Soda Fountains, and after visiting your manufacturing plant, I decided to give you my order, for one of your best apparatus, because I consider it the best value on the market.

Yours respectfully,

A. M. HOWARD, Druggist.

WE HAVE HUNDREDS OF SUCH TESTIMONIALS ON FILE  
WRITE US FOR FULL INFORMATION ABOUT OUR **WALRUS EITHERWAY** ICE OR ICELESS WORKS PERFECTLY EITHERWAY

**WALRUS MANUFACTURING COMPANY - DECATUR ILLINOIS**

AGENCIES AND REPRESENTATIVES THROUGHOUT THE UNITED STATES



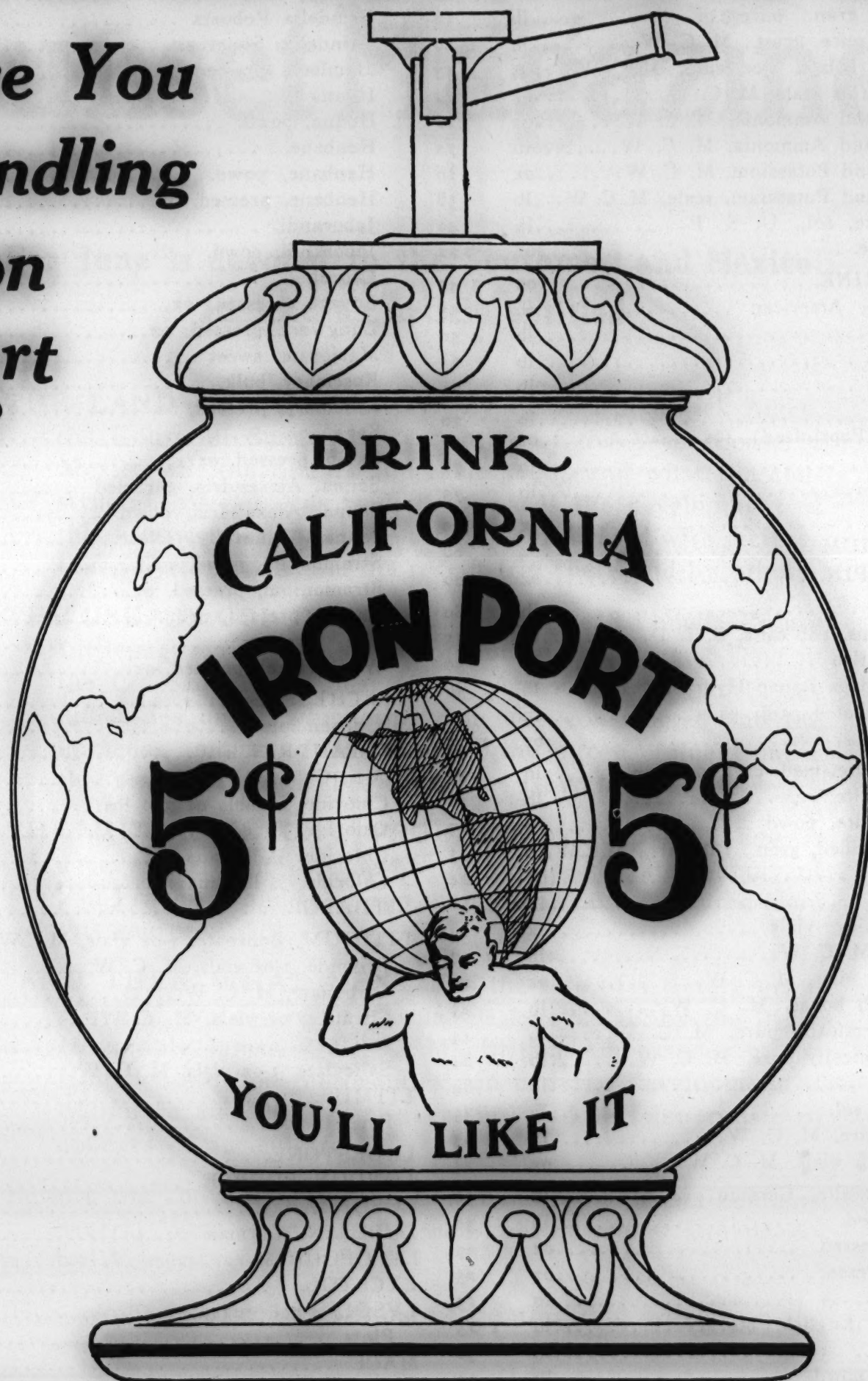
|                                            |           |    |                                               |         |
|--------------------------------------------|-----------|----|-----------------------------------------------|---------|
| Mastic tears .....                         | lb        | 80 | HYOSCYAMINE. Alkaloid, crys. 15-gr vls. ea    | 4 75    |
| Myrrh, Turkey. ....                        | lb        | 35 | Amorphous .....                               | gr 25   |
| Myrrh, Turkey, powd. ....                  | lb        | 40 | Hydrobromate, Amorph., 15-gr. ....            | ea 3 00 |
| Olibanum tears .....                       | lb        | 30 | Sulphate, crys., 15-gr .....                  | ea 3 03 |
| Opium .....                                | lb 5 70-5 | 85 | Sulphate, Amorph., 5-gr vials. ....           | ea 1 25 |
| Opium, powd. ....                          | lb 6 70-6 | 85 | IATROL. ....                                  | oz 95   |
| Sandarac .....                             | lb        | 40 | ICHTHARGAN .....                              | oz 3 00 |
| Scammony, Aleppo. ....                     | oz        | 40 | ICHTHORFORM .....                             | oz 1 00 |
| Scammony, Virgin, true. ....               | oz        | 75 | ICHTHYOL, 1-oz vials .....                    | oz 3 00 |
| Shellac, bleached .....                    | lb        | 60 | 1/4s .....                                    | oz 4 25 |
| Shellac, orange .....                      | lb        | 50 | 1/2s .....                                    | oz 4 10 |
| Shellac, ground .....                      | lb        | 55 | 1s .....                                      | oz 4 00 |
| Spruce. ....                               | lb 1      | 50 | INDIGO, Manila, extra. ....                   | lb 75   |
| Tamarac, true. ....                        | lb 1      | 25 | IODIPIN (10% Iodized Sesame oil) ....         | oz 32   |
| Thus. ....                                 | lb        | 12 | IODINE, Bromide, 1-oz vials, M.C.W. ....      | oz 42   |
| Tragacanth, ribbon .....                   | lb        | 95 | Chloride, 1-oz vials, M. C. W. ....           | oz 45   |
| Tragacanth, powd. ....                     | lb        | 75 | Resublimed, 1-oz vials, M. C. W. ....         | oz 34   |
| GUTTA PERCHA. Crude, shavings. ....        | lb 1      | 75 | Resublimed, M. C. W. ....                     | lb 3 03 |
| Crude, sheets. ....                        | lb 1      | 75 | Resublimed, N. Y. Q. ....                     | lb 3 03 |
| HEDONAL. ....                              | oz 1      | 60 | Resublimed, 1-lb bot, P. W. R. ....           | lb 3 03 |
| HEMICRANIN .....                           | oz        | 90 | Burnham's, soluble. ....                      | oz 1 00 |
| HEMOGALLOL .....                           | oz        | 80 | ODOFORM, M. C. W., 1-lb bots. ....            | lb 3 58 |
| Tablets .....                              | 100       | 80 | Iodoform, 1-lb bot, N. Y. Q. ....             | lb 3 58 |
| HEROIN. 1-oz. ....                         | oz 6      | 70 | Iodoform, 1-lb bot, P. W. R. ....             | lb 3 58 |
| 1/2-oz vial .....                          | oz 6      | 85 | Cryst. or powd .....                          | oz 33   |
| 1/4-oz vial .....                          | oz 7      | 00 | Deodorized. ....                              | oz 54   |
| 15-gr vial .....                           | ea        | 29 | IODOL. ....                                   | oz 1 25 |
| Hydrochloride, oz vial .....               | oz 6      | 70 | IRON, Acetate, dry, 1-oz vials, M.C.W. ....   | oz 20   |
| 1/2-oz vial .....                          | oz 6      | 85 | Acetate, liquor. ....                         | lb 44   |
| 1/4-oz vial .....                          | oz 7      | 00 | Albuminate. ....                              | oz 20   |
| 15-gr vial .....                           | ea        | 29 | Ammoniated, M. C. W. ....                     | lb 44   |
| HEXAMETHYLENAMINE .....                    | lb 1 29-1 | 40 | And Ammonium Cit .....                        | lb 75   |
| " .....                                    | oz        | 15 | Arsenate, 1-oz vials. ....                    | oz 18   |
| HIERA PICRA. ....                          | lb        | 50 | By Hydrogen .....                             | lb 60   |
| HOFFMAN'S ANODYNE. ....                    | lb        | 75 | Carbonate, precipitated. ....                 | lb 18   |
| HOMATROPINE, Alk'l'd, 5-gr vials. ....     | ea 2      | 25 | Carbonate, proto. ....                        | lb 42   |
| HOMATROPINE. Alk'l'd, 5-gr vials. ....     | ea 2      | 25 | Carbonate, saccharated .....                  | lb 40   |
| Hydrobromate, 5-gr vials .....             | ea 1      | 75 | Chloride, 1-oz vials. ....                    | oz 8    |
| Hydrochlorate, 5-gr vials .....            | ea 2      | 10 | Chloride, crystal. ....                       | lb 34   |
| HOMOGLOBIN. Powd .....                     | oz 1      | 04 | Chloride, sol. for tincture. ....             | pt 35   |
| HOPS, new, bulk. ....                      | lb        | 30 | Citrate, soluble, 1-oz vials. ....            | oz 12   |
| New, ozs. ....                             | lb        | 38 | Citrate, soluble, N. Y. Q. ....               | lb 73   |
| New, 1/4s, 1/2s. ....                      | lb        | 30 | Citrate, soluble, M. C. W. ....               | lb 73   |
| HYDROCHINON .....                          | oz        | 17 | Citrate and Quinine, N. Y. Q. ....            | lb 1 90 |
| " .....                                    | lb 1      | 42 | Citrate and Quinine, sol., M. C. W. ....      | lb 1 90 |
| HYDROGEN PEROXIDE, Drevet's U.S.P.,        |           |    | Citrate and Quinine with Strych., M.C.W. lb   | 2 50    |
| 1-lb bots. ....                            | doz 3     | 15 | Citrate and Quinine with Strych., M.C.W. oz   | 24      |
| Drevet's U.S.P., 1/2-lb bots. ....         | doz 2     | 00 | Citrate and Strychnine, 1-oz vials, M.C.W. oz | 16      |
| Drevet's U.S.P., 1/4-lb bots. ....         | doz 1     | 50 | Ferrocyanide, 1-oz vials, M. C. W. ....       | oz 10   |
| Marchand's, 1-lb bots. ....                | doz 8     | 50 | Ferrocyanide, M. C. W. ....                   | lb 65   |
| Marchand's, 1/2-lb bots. ....              | doz 5     | 50 | Filings. ....                                 | lb 16   |
| Marchand's, 1/4-lb bots. ....              | doz 4     | 00 | Glycerino Phosphate. ....                     | oz 32   |
| Marchand's, 1/8-lb bots. ....              | doz 2     | 35 | Hypophosphite, 1-oz vials, M. C. W. ....      | oz 20   |
| M. C. W., 1-lb bots. ....                  | doz 3     | 00 | Iodide, 1-oz vials, M. C. W. ....             | oz 33   |
| M. C. W., 1/2-lb bots. ....                | doz 1     | 80 | Lactate, 1-oz vials, M. C. W. ....            | oz 9    |
| M. C. W., 1/4-lb bots. ....                | doz 1     | 20 | Lactophosphate, 1-oz vials, M. C. W. ....     | oz 19   |
| Oakland, 1-lb bots. ....                   | doz 6     | 00 | Nitrate, sol., U. S. P., M. C. W. ....        | lb 34   |
| Oakland, 1/2-lb bots. ....                 | doz 3     | 75 | Oxide, black. ....                            | lb 49   |
| Oakland, 1/4-lb bots. ....                 | doz 2     | 00 | Oxide, brown, com'l .....                     | lb 22   |
| Oakland, 5-lb bots. ....                   | ea 1      | 50 | Oxide, brown, pure .....                      | lb 74   |
| HYDRO NAPHTHOL. ....                       | oz        | 75 | Peptonized .....                              | oz 24   |
| HYDRASTINE. Alkaloid .....                 | oz 10     | 04 | Phosphate, precipitate .....                  | lb 66   |
| Hydrochloride .....                        | oz 20     | 00 | Phosphate, U. S. P., scales, N. Y. Q. ....    | oz 12   |
| HYDRASTININE. Hydrochloride, 15-gr vls. ea | 3 00      |    | Phosphate, U. S. P., scales, N. Y. Q. ....    | lb 74   |
| HYDROQUINONE .....                         | oz        | 18 | Pyrophosphate, soluble, N. Y. Q. ....         | lb 74   |
| HYOSCINE. Amorphous, 15-gr vials. ....     | ea 2      | 00 | Pyrophosphate, U. S. P., 1880, N. Y. Q. ....  | oz 12   |
| Hydrobromate, 5-gr vials .....             | ea 2      | 00 | Pyrophosphate, powd., N. Y. Q. ....           | lb 1 08 |
| Hydriodide, 5-gr vials .....               | ea 2      | 00 | Reduced .....                                 | lb 60   |
| Sulphate, 5-gr vials .....                 | ea 2      | 00 | Reduced .....                                 | oz 10   |

\*Articles quoted in this Journal as M. C. W. are the products of the Mallinckrodt Chemical Works.



# Let the Urn Earn Profit for You

**Are You  
handling  
Iron  
Port  
?**



Are you handling Iron Port? If not, get in line on the biggest money maker ever dispensed at the Soda Fountain.

Let us tell you how to get our attractive Syrup Urn *Free of Charge*.

**Write for Our Special Offer**

Inquiries from Wholesalers Solicited. Special Inducements to Soda Water Bottlers.

Samples mailed free on application.

**MAGNUS & LAUER**

*Sole  
Manufacturers*

**250 8th Street**

**San Francisco, Cal.**



|                                                |      |                                            |       |
|------------------------------------------------|------|--------------------------------------------|-------|
| Salicylate, 1-oz vials, M. C. W.....oz         | 15   | Coltsfoot, pressed. ....oz                 | 25    |
| Subsulphate, M. C. W.....oz                    | 6    | Damiana.....lb                             | 30    |
| Subsulphate, M. C. W.....lb                    | 36   | Digitalis, pressed. ....oz                 | 35    |
| Subsulphate, sol., M. C. W.....lb              | 23   | Digitalis. . . . .lb                       | 35    |
| Succinate .....oz                              | 60   | Digitalis, powd. ....lb                    | 35    |
| Sulphate, dried. ....lb                        | 20   | Eucalyptus. . . . .lb                      | 20    |
| Sulphate, gran., pure.....lb                   | 18   | Grindelia Robusta .....lb                  | 25    |
| Sulphate, pure, cryst., M. C. W.....lb         | 20   | Grindelia Squarosa .....lb                 | 40    |
| Sulpho-Carbolate, 1-oz vials, M. C. W....oz    | 13   | Hemlock, pressed. ....oz                   | 30    |
| Tannate, 1-oz vials, M. C. W.....oz            | 22   | Henna .....lb                              | 40    |
| Tartrate and Ammonia, M. C. W.....oz           | 11   | Henna, powd: .....lb                       | 50    |
| Tartrate and Ammonia, M. C. W.....lb           | 72   | Henbane. . . . .lb                         | 30    |
| Tartrate and Potassium, M. C. W.....oz         | 10   | Henbane, powd. ....lb                      | 30    |
| Tartrate and Potassium, scale, M. C. W...lb    | 58   | Henbane, pressed, oz.....lb                | 30    |
| Tersulphate, sol., U. S. P.....lb              | 40   | Jaborandi. . . . .lb                       | 35    |
| Valerianate. . . . .oz                         | 22   | Jaborandi, powd. ....lb                    | 40    |
| IODOTHYRINE. . . . .oz                         | 3 40 | Laurel. . . . .lb                          | 25    |
| ISINGLASS, American .....lb                    | 1 05 | Lovage, pressed, oz.....lb                 | 30    |
| Russian .....lb                                | 4 50 | Lungwort, pressed, oz.....lb               | 34    |
| KAMALA. . . . .lb                              | 65   | Marjoram, sweet .....lb                    | 36    |
| Powd. . . . .lb                                | 75   | Rosemary, bulk. ....lb                     | 21    |
| KAOLIN.....lb                                  | 10   | Rosemary, pressed, oz. ....lb              | 21    |
| KERATIN (Pepsinized), 1/8s .....oz             | 3 53 | Sage, oz. ....lb                           | 25    |
| KOUSSO. . . . .lb                              | 75   | Savin, pressed, oz.....lb                  | 25    |
| Powd.....lb                                    | 75   | Senna, Alexandria, garbeled .....lb        | 35    |
| KRYOFINE. . . . .oz                            | 1 00 | Senna, Alexandria, powd. ....lb            | 30    |
| LACTUCARIUM .....oz                            | 80   | Senna, Tinnevely, select.....lb            | 18    |
| LACTOPHEPIN. . . . .oz                         | 1 00 | Stramonium, powd. ....lb                   | 30    |
| LANOLIN. . . . .lb                             | 80   | Stramonium, pressed, oz.....lb             | 25    |
| Lanae Adeps, 1-lb cans, B. J. D.....lb         | 35   | Thyme, pressed, oz.....lb                  | 25    |
| Lanae, British .....lb                         | 30   | Uva, Ursi. ....lb                          | 20    |
| LANUM (Adeps Lanae Hydrosus).....lb            | 30   | Witch Hazel, pressed, oz.....lb            | 25    |
| LARD, Benzoated, 5-lb cans.....lb              | 28   | LEECHES. . . . .ea                         | 10    |
| LARGIN .....oz                                 | 1 75 | 2 dozen lots.....ea                        | 8     |
| LEAD. Acetate, med. crys. or gran.....lb       | 33   | LEPTANDRIN. . . . .oz                      | 35    |
| Acetate, white .....lb                         | 16   | LIME, Chloride, 35-lb cans.....lb          | 4     |
| Acetate, white, powd.....lb                    | 25   | Chloride, in bbls of 350 lbs.....lb        | 2 1/4 |
| Acetate, purified, gran., 1-lb cart., M.C.W.lb | 33   | Chloride, lb cans.....doz                  | 80    |
| Bromide. . . . .oz                             | 24   | Chloride, 1/2-lb cans .....doz             | 60    |
| Carbonate.....lb                               | 12   | Chloride, 1/4-lb cans.....doz              | 45    |
| Chloride, 1-oz vials.....oz                    | 13   | LITHARGE. . . . .lb                        | 12    |
| Chromate, M. C. W.....lb                       | 1 19 | LITHIUM, Benzoate, 1-oz vials, M.C.W....oz | 13    |
| Iodide, 1-oz vials, M. C. W.....oz             | 25   | Bromide, 1-oz vials, M. C. W.....oz        | 20    |
| Nitrate, 1-lb boxes, M. C. W.....lb            | 23   | Carbonate, M. C. W.....oz                  | 14    |
| Nitrate, chemically pure, M. C. W.....lb       | 44   | Citrate, 1-oz vials, M. C. W.....oz        | 16    |
| Oxide, chemically pure, M. C. W.....lb         | 84   | Iodide .....oz                             | 32    |
| Oxide .....lb                                  | 84   | Salicylate, 1-oz vials, M. C. W.....oz     | 15    |
| Subacetate, sol. ....lb                        | 35   | LITMUS. . . . .lb                          | 50    |
| Sulphate, pure, M. C. W.....lb                 | 63   | Paper .....doz                             | 40    |
| Tannate, 1-oz vials, M. C. W.....oz            | 24   | LODESTONE. . . . .lb                       | 75    |
| LEAVES, Aconite, German.....lb                 | 30   | LONDON PURPLE. ....lb                      | 20    |
| Aconite, powd. ....lb                          | 30   | LOSOPHAN. . . . .oz                        | 1 80  |
| Aconite, pressed. ....oz                       | 25   | LUPULIN, German .....lb                    | 70    |
| Angelica, pressed. ....oz                      | 25   | LYCOPodium .....lb                         | 60-70 |
| Bay, bulk. ....lb                              | 15   | LYCETOL. . . . .oz                         | 4 25  |
| Belladonna, English, bts.....lb                | 1 25 | LYSOL, 1-gal. jugs.....gal                 | 4 00  |
| Belladonna. . . . .lb                          | 30   | Pints. . . . .doz                          | 8 00  |
| Belladonna, powd. ....lb                       | 35   | MACE .....lb                               | 60    |
| Belladonna, pressed. ....oz                    | 35   | Powd. ....lb                               | 70    |
| Blessed Thistle, pressed.....oz                | 34   | MADDER, Dutch. . . . .lb                   | 15    |
| Borage, pressed. ....oz                        | 35   | MAGNESIUM, Benzoate, M. C. W.....oz        | 24    |
| Buchu, long .....lb                            | 45   | Bromide, Mallinckrodt's. ....oz            | 25    |
| Buchu, short .....lb                           | 40   | Calcined, Jennings', 1-lb cans.....lb      | 85    |
| Buchu, powd. ....lb                            | 40   | Calcined, K. & M.'s, 1-lb cans.....lb      | 75    |
| Buckbean, pressed .....oz                      | 30   | Calcined, K. & M.'s, heavy.....lb          | 80    |
| Cocoa.....lb                                   | 45   | Carbonate, Jennings', 2-oz.....lb          | 30    |
| Conium. . . . .lb                              | 30   | Carbonate, Jennings', 4-oz.....lb          | 30    |
| Conium, powd. ....lb                           | 35   | Carbonate, K. & M.'s, 1-oz.....lb          | 25    |
| Conium, pressed. ....oz                        | 30   | Carbonate, K. & M.'s, 2-oz.....oz          | 23    |

\*Articles quoted in this Journal as M. C. W. are the products of the Mallinckrodt Chemical Works.



# Sunset Magazine

**For June is devoted to the Southwest and Mexico.  
Its leading article entitled**

**THE LAND OF TOMORROW**, by Charles Sedgwick Aiken, the Editor of **Sunset**, is descriptive of the West Coast of Mexico, the inhabitants and their habits and what the construction of railroads is doing towards the development of this vast wonderland. The article is illustrated with pictures taken by the writer on his recent trip there and by others.

**THE USEFUL COLORADO**—Under this head Louella Prouty Littlepage writes of the completion of the Laguna Dam in the Colorado River, near Yuma, Arizona, setting forth the difficulties under which this dam was constructed and the immense amount of land it will bring into usefulness under the Yuma Irrigation Project of the Government.

**THE HETCH-HETCHY PROBLEM**, by John P. Young, is a very interesting article on the proposed water supply of San Francisco and the large supply that can be secured from this source.

**"AND THEN WHAT NEXT?"** is the title of a lecture given at the University of California, Berkeley, Cal., by the Right Honorable James Brice, O. M., British Ambassador to the United States, on the beauties and material development of California and the West in general and the importance of colleges of agriculture.

Besides the above articles, the June number of **Sunset** contains several Western stories by well-known writers and poems by Western poets.

This number also contains some very interesting articles on the central and north central sections of the State.

**On Sale May 25th**

**At all News Stands**

**15 cents per copy**



|                                                                 |       |                                             |           |
|-----------------------------------------------------------------|-------|---------------------------------------------|-----------|
| Carbonate, K. & M.'s, 4-oz.....lb                               | 23    | MOSS, Iceland .....lb                       | 15        |
| Carbonate, K. & M.'s, small sq.....lb                           | 60    | Irish. . . . .lb                            | 15        |
| Carbonate, powd., in 65-lb bbls.....lb                          | 8     | Irish, bleached. ....lb                     | 20        |
| Carbonate, powd., in 10-lb boxes.....lb                         | 15    | MUSK, Chinese .....oz                       | 40        |
| Citrate, dry, English.....lb                                    | 65    | Tonquin, grain .....dr                      | 3 50      |
| Citrate, sol. ....doz                                           | 1 75  | MUSTARD, Colman's, 4-oz cans.....doz        | 1 75      |
| Glycerinophosphate .....oz                                      | 44    | Colman's, 5-lb cans .....lb                 | 50        |
| Hypophosphite, 1-oz vials, M. C. W.....oz                       | 20    | Ground, Domestic, 5-lb cans.....lb          | 18        |
| Hypophosphite, M. C. W.....lb                                   | 1 69  | NAPHTHALIN, Balls ....bbls, 3c.....lb       | 5-7       |
| Hypophosphite .....oz                                           | 20    | Resublimated .....lb                        | 27        |
| Iodide, M. C. W.....oz                                          | 47    | Pure, 1-lb cartons, M. C. W.....lb          | 27        |
| Sulphite, M. C. W.....lb                                        | 49    | NAPHTHOL, Alpha. ....oz                     | 30        |
| MANGANESE, Black, Oxide .....lb                                 | 8-10  | Beta .....oz                                | 10        |
| Phosphate, M. C. W.....oz                                       | 18    | NICKEL, Bromide .....oz                     | 32        |
| Carbonate, 1-oz vials, M. C. W.....oz                           | 14    | Bromide, 1-oz vials, M.C.W.....oz           | 29        |
| Chloride, 1-oz vials, M. C. W.....oz                            | 14    | Nickel and Ammonia Sulphate, M. C. W..lb    | 34        |
| Hypophosphite, 1-oz vials, M. C. W.....oz                       | 20    | Sulphate, 1-oz vials, M. C. W.....oz        | 9         |
| Hypophosphite .....oz                                           | 20    | Sulphate .....oz                            | 10        |
| Iodide, 1-oz vials, M. C. W.....oz                              | 47    | NOSOPHEN.....doz                            | 4 50      |
| Peptonized .....oz                                              | 29    | NUTGALLS, Aleppo .....lb                    | 30        |
| Phosphate, M. C. W.....oz                                       | 18    | Aleppo, ground. ....lb                      | 35        |
| Sulphate, 1-oz vials, M. C. W.....oz                            | 9     | Aleppo, powd. ....lb                        | 35        |
| MANNA, Large flake .....lb                                      | 1 05  | NUTMEGS, Macassar, large .....lb            | 40        |
| Small flake .....lb                                             | 60-70 | Penang, powd. ....lb                        | 45        |
| Crystallized .....lb                                            | 3 25  | NUTS, Areca .....lb                         | 30        |
| MERCURY, Chloride .....lb                                       | 99    | Areca, powd. ....lb                         | 40        |
| Ammoniated, white precip.....lb                                 | 1 23  | Kola. . . . .lb                             | 35        |
| Bisulphate .....lb                                              | 79    | Kola, powd. ....lb                          | 40        |
| Cyanide .....oz                                                 | 27    | NUX VOMICA .....lb                          | 20        |
| Iodide, green, 1-oz vials, M. C. W.....oz                       | 23    | Powdered or rasped.....lb                   | 25        |
| Iodide, red, 1-oz vials, M. C. W.....oz                         | 25    | OAKUM .....lb                               | 15        |
| Iodide, yellow, 1-oz vials, M. C. W.....oz                      | 23    | Surgeon's. ....lb                           | 20        |
| Nitrate, proto., 1-oz vials, M. C. W.....oz                     | 27    | OIL, Almonds, Bitter, true, Merck's.....lb  | 6 59      |
| Nitrate solution, 1-oz vials.....oz                             | 17    | Almonds, Bitter, Allen's.....oz             | 75        |
| Oxide, black, 1-oz vials.....oz                                 | 18    | Almonds, Sweet, Allen's.....lb              | 80        |
| Oxide, red (red precip.).....lb                                 | 1 15  | Almonds, Sweet .....lb                      | 50-65     |
| Oxide, yellow, 1-oz vials.....oz                                | 16    | Amber, rectified. ....lb                    | 60        |
| Salicylate, M. C. W.....oz                                      | 27    | Anise .....lb                               | 1 75-2 00 |
| Subsulphate, 1-oz vials. ....oz                                 | 15    | Bay Leaves, true.....oz                     | 35        |
| Subsulphate .....lb                                             | 1 12  | Bay Leaves .....lb                          | 3 75-4 00 |
| Sulphuret, black. ....lb                                        | 78    | Benne.....gal                               | 1 20      |
| White Chalk, 1-lb cartons .....lb                               | 46    | Bergamot .....lb                            | 6 00      |
| METHYL, SALICYLATE. ....lb                                      | 80    | Birch Tar, rectified.....lb                 | 1 25      |
| METHYLENE. Blue medicinal .....oz                               | 30    | Cade.....lb                                 | 50        |
| MILK, Borden's Malted, trial size.....doz                       | 75    | Cajuput (21-oz bottles) .....lb             | 90-1 00   |
| Small size .....doz                                             | 4 00  | Calamus .....oz                             | 40        |
| Large size .....doz                                             | 8 00  | Camphor, E. I. ....lb                       | 45        |
| Hospital size .....doz                                          | 33 00 | Caraway, seed. ....lb                       | 2 25      |
| \$12.00 lots, 5%                                                |       | Cardamon. . . . .oz                         | 2 50      |
| \$48.00 lots, 10%                                               |       | Cassia .....lb                              | 1 85-2 00 |
| MILK SUGAR, Cryst. ....lb                                       | 30    | Castor, Baker's A. A. ....gal               | 1 20-1 25 |
| Powdered, bulk .....lb                                          | 19    | Castor, Marsh's .....gal                    | 1 20      |
| M. C. W., 1-lb cartons, 10 lb 19.....lb                         | 21    | Castor, 2-oz bottles.....doz                | 85        |
| MORPHINE, Sulphate, 1/8s, 1-oz box, M. C. W. ....oz             | 3 35  | Castor, 4-oz bottles.....doz                | 1 25      |
| Sulphate, 1/8s, 2 1/2-oz box, M. C. W.....oz                    | 3 30  | Castor, 6-oz bottles.....doz                | 1 75      |
| Sulphate, 1-oz vials, M. C. W.....oz                            | 3 10  | Castor, 8-oz bottles.....doz                | 2 25      |
| Sulphate, 5-oz can, M. C. W.....oz                              | 3 05  | Castor, 12-oz bottles.....doz               | 2 50      |
| Sulphate, 1 1/8s, 1-oz box, N. Y. Q.....oz                      | 3 35  | Castor, 16-oz bottles.....doz               | 3 75      |
| Sulphate, 1 1/8s, 2 1/2-oz box, N. Y. Q.....oz                  | 3 30  | Cedar .....lb                               | 50-75     |
| Sulphate, 1-oz vials, N. Y. Q.....oz                            | 3 10  | Cedrat. . . . .oz                           | 40        |
| Sulphate, 1/8s, 2 1/2-oz box, P. W. R.....oz                    | 3 30  | Celery. . . . .oz                           | 1 40      |
| Sulphate, 1-oz bot, P. W. R.....oz                              | 3 10  | Chamomile, German .....oz                   | 6 00      |
| In 10-oz lots, 10c oz less.                                     |       | Chamomile, Roman .....oz                    | 2 00      |
| Morphia, Acetate, 1/8s, M. C. W.....oz                          | 3 50  | China, Nut .....gal                         | 90        |
| Morphia, Muriate, 1/8s, M. C. W.....oz                          | 3 50  | Cinnamon, Ceylon. ....oz                    | 90        |
| Morphia, Valerianate, 1/8s, M. C. W.....oz                      | 4 50  | Citronella .....lb                          | 75-85     |
| Other salts or Morphine subject to market price based on above. |       | Cloves .....lb                              | 1 20-1 40 |
|                                                                 |       | Cocoonut .....lb                            | 20-25     |
|                                                                 |       | Codliver, White, Norwegian.....gal          | 1 30      |
|                                                                 |       | Codliver, White, Norwegian, 5-gal cans..gal | 1 25      |

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|                                        |           |                                           |           |
|----------------------------------------|-----------|-------------------------------------------|-----------|
| Cognac, green. ....oz                  | 2 50      | Sandalwood, imitation ....lb              | 2 40-2 60 |
| Cologne. ....oz                        | 50        | Sassafras ....lb                          | 90        |
| Copaiba. ....lb                        | 1 75      | Savin. ....lb                             | 1 75      |
| Coriander. ....oz                      | 90        | Spearmint ....lb                          | 4 50      |
| Cotton Seed (salad), 5-gal can.....gal | 80        | Sperm. ....gal                            | 1 00      |
| Cotton Seed (salad), 1-gal can.....gal | 90        | Spike ....lb                              | 40        |
| Croton, 24-oz bots.....lb              | 1 50-1 65 | Spruce.....lb                             | 85        |
| Croton .....oz                         | 20        | Tansy ....lb                              | 5 50      |
| Cubebs ....lb                          | 2 40-2 60 | Tar.....lb                                | 25        |
| Ergot, Keith's. ....oz                 | 57        | Thyme, white. ....lb                      | 1 50      |
| Erigeron, Keith's. ....oz              | 38        | Turpentine, pure. ....lb                  | 55        |
| Erigeron .....lb                       | 2 75      | Wine, light. ....oz                       | 40        |
| Eucalyptus .....lb                     | 80        | Wine, heavy. ....oz                       | 50        |
| Fennel Seed .....lb                    | 2 25      | Wintergreen .....lb                       | 3 80      |
| Fusil, purified. ....lb                | 80        | Wormseed.....lb                           | 3 75-4 00 |
| Geranium, Rose, Chris.....oz           | 75        | Wormwood .....lb                          | 5 50-6 00 |
| Hemlock. ....lb                        | 85        | Ylang Ylang. ....oz                       | 4 50      |
| Hydrocarbon .....gal                   | 1 10-1 25 | .....lb                                   | 65        |
| Jasmin, alcoholic. ....lb              | 3 00      | .....lb                                   | 65        |
| Juniper Berries .....lb                | 1 80-2 00 | .....lb                                   | 1 25      |
| Juniper, wood. ....lb                  | 75        | Mercurial, 1/2 m.....lb                   | 65        |
| Lard .....gal                          | 1 00      | Mercurial, 1/2 m.....lb                   | 55        |
| Laurel, expressed. ....lb              | 60        | Stramonium. ....lb                        | 75        |
| Lavender, Flowers .....lb              | 3 40      | Tar.....lb                                | 50        |
| Lavender, Garden .....lb               | 1 25      | Zinc, benzoated. ....lb                   | 65        |
| Lemon . . . . .lb                      | 1 50-1 60 | Zinc, oxide. ....lb                       | 65        |
| Lemon, Sanderson's .....lb             | 1 75-2 00 | OPIUM, powd. or gran., P. W. R.....lb     | 6 70-6 85 |
| Lemon, Grass .....lb                   | 2 25      | ORTHOFORM .....oz                         | 1 40      |
| Linseed, raw .....gal                  | 85        | PANCREATIN. Pure .....oz                  | 44        |
| Linseed, raw, case.....gal             | 78        | Pure, scales, P. D. & Co.....oz           | 50        |
| Linseed, boiled .....gal               | 90        | PAPAIN, Boehringer .....oz                | 60        |
| Linseed, boiled, case.....gal          | 83        | PARAFFINE, refined .....lb                | 10-12     |
| Mace, expressed. ....lb                | 1 75      | PARALDEHYDE .....lb                       | 89        |
| Male Fern, ethereal .....oz            | 25        | .....oz                                   | 14        |
| Myrbane .....lb                        | 35        | PARIS GREEN. ....lb                       | 38-42     |
| Mullein.....oz                         | 45        | PASTILLES, Fumigating, black.....lb       | 40        |
| Musk, alcoholic. ....oz                | 1 00      | Fumigating, red .....lb                   | 40        |
| Mustard, essential .....oz             | 45        | PEARL ASH. ....lb                         | 8-10      |
| Mustard, expressed. ....gal            | 90        | PEEL, Orange, sweet, ground.....lb        | 20        |
| Neatsfoot, No. 1 .....gal              | 1 00      | Orange, bitter, coarse.....lb             | 20        |
| Neroli, Petal. ....oz                  | 3 00      | Orange, bitter, powdered.....lb           | 20        |
| Neroli, Bigarade. ....oz               | 5 75      | Orange, sweet, quarters.....lb            | 20        |
| Neroli, Petit Grain. ....oz            | 55        | PELLETIERINE, Sulphate, 15-gr vial.....   | 1 75      |
| Nutmegs, essential. ....oz             | 35        | Tannate, 15-gr vial .....oz               | 35        |
| Olive, pure, Malaga.....gal            | 1 25      | PEPPER, black, Singapore, sifted.....lb   | 30        |
| Olive, California .....gal             | 2 50      | Black, powd. ....lb                       | 30        |
| Olive, 1/2-gals. ....gal               | 2 75      | White. ....lb                             | 40        |
| Olive, medium .....doz                 | 3 50      | White, powd. ....lb                       | 40        |
| Olive, large. ....doz                  | 7 50      | PEPSIN, pure, U. S. P.....lb              | 4 50      |
| Olive, imported .....gal               | 2 20-2 50 | Powd. or scales. ....lb                   | 4 50      |
| Orange, bitter .....lb                 | 3 80      | Powd., Ph. G. III.....oz                  | 25        |
| Orange, sweet .....lb                  | 3 00-3 25 | PEPTONE, Merck's, dry, from meat.....oz   | 34        |
| Origanum, pure .....lb                 | 45        | PETROLATUM, 1-lb cans.....doz             | 2 00      |
| Origanum, Chris. ....lb                | 1 85      | 50-lb pails. ....lb                       | 7         |
| Palm. ....lb                           | 25        | 25-lb pails. ....lb                       | 7 1/2     |
| Patchouly.....oz                       | 75        | 10-lb cans. ....lb                        | 9         |
| Pennyroyal .....lb                     | 3 60      | 5-lb cans. ....lb                         | 10        |
| Pepper, black. ....oz                  | 20        | Snow White, 50-lb pails.....lb            | 15 1/2    |
| Peppermint, Hotchkiss .....lb          | 2 70      | Snow White, 25-lb pails.....lb            | 16 1/2    |
| Peppermint, Wayne Co. ....lb           | 2 20      | Snow White, 10-lb cans.....lb             | 18        |
| Peppermint, Western .....lb            | 2 00-2 20 | Snow White, 5-lb cans.....lb              | 19        |
| Pimento. ....oz                        | 20        | Snow White, 1-lb cans.....lb              | 30        |
| Pinus, Sylvestris, German.....lb       | 1 20-1 40 | PHENACETINE. ....oz                       | 33        |
| Pinus, Pumilio. ....lb                 | 4 50      | PHENILINE. ....oz                         | 1 00      |
| Pinus Pumilio. ....oz                  | 40        | PHENOLPHTHALEIN .....oz                   | 34        |
| Rhodium .....oz                        | 35        | PHOSPHORUS, 1-lb cans.....lb              | 85        |
| Rose, Kizanlik .....oz                 | 7 00      | 1/2-lb cans.....lb                        | 95        |
| Rosemary, flowers .....lb              | 1 25-1 40 | 1/4-lb cans.....lb                        | 1 05      |
| Rue.....oz                             | 40        | Amorphous. ....lb                         | 1 44      |
| Sandalwood, English .....lb            | 4 50      | PIPERAZIN, Schering's 10-gm vials.....bot | 1 50      |

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|                                                   |       |                                               |      |
|---------------------------------------------------|-------|-----------------------------------------------|------|
| $\frac{1}{2}$ -oz and 1-oz.....oz                 | 4 25  | Insect, Mrs. Hill's, 6-lb cans.....lb         | ..   |
| PIPERIN, 1-oz vials, Mallinckrodt's.....oz        | 62    | Out of market this season.                    |      |
| PIPE CLAY.....lb                                  | 12    | Jalap, comp.....lb                            | 1 00 |
| PITCH, Burgundy.....lb                            | 15    | Licorice, comp.....lb                         | 25   |
| PITH, Sassafras.....lb                            | 1 50  | Licorice, comp., 2-oz packages.....doz        | 75   |
| PLATINUM and Barium Cyanide, cr.....gr            | 15    | Rhubarb, comp.....lb                          | 1 50 |
| Chloride.....oz                                   | 17 00 | Tooth.....lb                                  | 50   |
| Chloride, solution, 10%.....oz                    | 2 82  | PROPYLAMIN, 10% solution.....oz               | 55   |
| PODOPHYLLIN.....oz                                | 30    | Hydrochlorate, $\frac{1}{8}$ -oz vials.....oz | 3 50 |
| POPPY HEADS, German.....lb                        | 30    | PROTARGOL.....oz                              | 1 25 |
| POTASH, Babbitt's, 4 doz in case.....case         | 3 40  | PULVIS ANTIMONIALIS.....lb                    | 85   |
| Caustic, pure, by alcohol.....lb                  | 60    | PYOKTANIN, Blue or Yellow.....oz              | 1 50 |
| Caustic, white.....lb                             | 37    | PYRIDINE.....oz                               | 32   |
| Caustic, 25-lb cans.....lb                        | 14    | QUICKSILVER.....lb                            | 80   |
| Solution (liq. potass.).....lb                    | 35    | QUINACETINE.....oz                            | 85   |
| POTASSIUM. Acetate, M. C. W., 1-lb.....lb         | 42    | QUINALGIN.....oz                              | 1 25 |
| Antimonate.....lb                                 | 1 09  | QUININE, Alkaloid, 1-oz vials, M.C.W.....oz   | 54   |
| Arsenate, 1-oz vials.....oz                       | 14    | Bisulphate, 1-oz vials, M.C.W.....oz          | 26   |
| Bicarbonate, cryst., M. C. W.....lb               | 20    | Bisulphate, 5-oz cans, M.C.W.....oz           | 24   |
| Bicarbonate, granulated, M. C. W.....lb           | 20    | Citrate, 1-oz vials, M.C.W.....oz             | 53   |
| Bicarbonate, powd.....lb                          | 20    | Muriate, 1-oz vials, M.C.W.....oz             | 47   |
| Bichromate.....lb                                 | 18-20 | Phosphate, 1-oz vials, M.C.W.....oz           | 52   |
| M. C. W.....lb                                    | 34    | Salicylate, 1-oz vials, M.C.W.....oz          | 50   |
| Bromide, crys. or gran., M. C. W.....lb           | 30    | Sulphate, 1-oz cans, M.C.W.....oz             | 26   |
| Carbonate, purified, M. C. W.....lb               | 41    | Sulphate, 5-oz cans, M.C.W.....oz             | 23   |
| Carbonate, bulk.....lb                            | 15    | Sulphate, 25-oz cans, M.C.W.....oz            | 19   |
| Caustic, pure.....lb                              | 37    | Sulphate, 50-oz cans, M.C.W.....oz            | 18   |
| Caustic, C. P.....lb                              | 2 59  | Sulphate, 100-oz cans, M.C.W.....oz           | 16   |
| Chlorate, cryst.....lb                            | 16-18 | Sulphate, 1-oz cans, N. Y. Q.....oz           | 26   |
| Chlorate, gran., pure, M. C. W.....lb             | 22    | Sulphate, 5-oz cans, N. Y. Q.....oz           | 23   |
| Chlorate, powd.....lb                             | 16-18 | Sulphate, 25-oz cans, N. Y. Q.....oz          | 19   |
| Chloroplatinite, M. C. W., 15-gr vials.....each   | 80    | Sulphate, 100-oz cans, N. Y. Q.....oz         | 16   |
| Chromate, yellow, neutral.....lb                  | 40    | Sulphate, 1-oz cans, P. W. R.....oz           | 26   |
| Citrate, M. C. W.....lb                           | 66    | Sulphate, 5-oz cans, P. W. R.....oz           | 23   |
| Cyanide, fused, M. C. W.....lb                    | 45    | Sulphate, 25-oz cans, P. W. R.....oz          | 19   |
| Cyanide, C. P. 99%.....lb                         | 52    | Sulphate, 100-oz cans, P. W. R.....oz         | 16   |
| Cyanide, Miner's, 10-lb tin.....lb                | 28    | Tannate, Neutral.....oz                       | 35   |
| Ferricyanide, chem. pure, M. C. W.....lb          | 1 04  | Tannate, 1-oz vials, M.C.W.....oz             | 35   |
| Ferrocyanide, pure.....lb                         | 59    | Valerianate, 1-oz vials, M.C.W.....oz         | 53   |
| Glycerinophosphate.....oz                         | 26    | QUINOLINE.....oz                              | 45   |
| Hypophosphite, M. C. W.....lb                     | 99    | Tartarate.....oz                              | 45   |
| Iodide, M. C. W., 1-lb boxes.....lb               | 2 17  | QUINIDINE. N. Y. Q., 1-oz vial.....oz         | 85   |
| Iodide, N. Y. Q., 1-lb boxes.....lb               | 2 17  | Sulphate, N. Y. Q., 1-oz vial.....oz          | 75   |
| Iodide, cryst. or gran., 1-lb boxes, P.W.R.....lb | 2 17  | RED SAUNDERS.....lb                           | 12   |
| Nitrate, cryst.....lb                             | 10-12 | RESIN, Jalap.....oz                           | 54   |
| Nitrate, granulated.....lb                        | 10-12 | RESORCINOL (Resorcin) M. C. W.....lb          | 1 30 |
| Nitrate, chemically pure, M. C. W.....lb          | 30    | Resorcinol (Resorcin) M. C. W.....oz          | 17   |
| Oxalate, neutral.....lb                           | 28    | ROOT, Abscess, pressed, lb.....lb             | 40   |
| Permanganate, cryst., 1-oz vials.....oz           | 8     | Aconite, powd.....lb                          | 35   |
| Permanganate, large cryst., pure, M.C.W.....lb    | 27    | Aconite, pressed.....lb                       | 32   |
| Permanganate, small cryst.....lb                  | 25    | Copaiba.....lb                                | 1 50 |
| Phosphate, 1-oz vials.....oz                      | 11    | Scamony.....oz                                | 40   |
| Phosphate.....lb                                  | 64    | Alkanet.....lb                                | 25   |
| Prussiate, red.....lb                             | 65    | Alkanet, powd.....lb                          | 30   |
| Prussiate, yellow.....lb                          | 30    | Angelica, pressed.....lb                      | 20   |
| Sulphate, cryst. or powd.....lb                   | 16    | Angelica, powd.....lb                         | 25   |
| Sulphate, chemically pure.....lb                  | 60    | Arnica, pressed.....lb                        | 35   |
| Sulphide (Liver Sulphur).....lb                   | 24    | Belladonna, pressed, lb.....lb                | 25   |
| Tartrate (soluble Tartar).....lb                  | 59    | Belladonna, powd.....lb                       | 28   |
| POWDER, Antimonial.....lb                         | 85    | Berberis Aquif, pressed, lb.....lb            | 45   |
| Aromatic.....lb                                   | 1 25  | Beth, pressed, lb.....lb                      | 30   |
| Carbolic, disinfecting.....doz                    | 1 50  | Beth, powd.....lb                             | 35   |
| Chalk, aromatic.....lb                            | 75    | Blackberry, pressed, lb.....lb                | 30   |
| Chalk, compound.....lb                            | 75    | Blood, pressed, lb.....lb                     | 30   |
| Chalk and Opium.....lb                            | 2 50  | Blood, powd.....lb                            | 35   |
| Composition, 2-oz papers.....lb                   | 35    | Blue Flag, pressed.....lb                     | 25   |
| Dover's.....lb                                    | 1 70  | Burdock, pressed, lb.....lb                   | 25   |
| Insect, Buhach, 6-lb cans.....lb                  | 65    | Burdock, powd.....lb                          | 25   |
| Insect, Dalmatian.....lb                          | 25-30 | Calamus, peeled.....lb                        | 30   |

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|                                         |               |                                       |       |         |
|-----------------------------------------|---------------|---------------------------------------|-------|---------|
| Calamus, white, peeled and split.....lb | 50            | Rhatany, powd .....                   | lb    | 35      |
| Calamus, powd.....lb                    | 35            | Rhubarb, East India .....             | lb    | 75      |
| Cohosh, black, pressed. ....lb          | 25            | Rhubarb, East India, powd .....       | lb    | 75      |
| Cohosh, black, powd. ....lb             | 25            | Rhubarb, cut in cubes, No. 1.....lb   | 1 25  |         |
| Cohosh, blue, pressed, lb.....lb        | 25            | Rhubarb, cut in cubes, No. 2.....lb   | 1 00  |         |
| Cohosh, blue, powd. ....lb              | 25            | Rhubarb, cut in fingers, No. 1.....lb | 1 50  |         |
| Colchicum .....                         | lb            | Rhubarb, cut in fingers, No. 2.....lb | 1 25  |         |
| Colchicum, powd .....                   | lb            | Salep, powd .....                     | lb    | 1 00    |
| Columbo, foreign. ....lb                | 25            | Sarsaparilla, American .....          | lb    | 35      |
| Columbo, powd.....lb                    | 25            | Sarsaparilla, American, powd .....    | lb    | 35      |
| Comfrey, pressed, lb. ....lb            | 25            | Sarsaparilla, Honduras .....          | lb    | 65      |
| Comfrey, powd.....lb                    | 25            | Sarsaparilla, Honduras, ground .....  | lb    | 55      |
| Cranesbill, pressed, lb.....lb          | 25            | Sarsaparilla, Honduras, powd. ....lb  | 55    |         |
| Culvers, pressed, lb.....lb             | 25            | Sarsaparilla, Mexican .....           | lb    | 20      |
| Culvers, powd .....                     | lb            | Sarsaparilla, Mexican, ground .....   | lb    | 25      |
| Dandelion, Am., pressed, lb.....lb      | 35            | Sarsaparilla, Mexican, powd .....     | lb    | 25      |
| Dandelion, powd .....                   | lb            | Senega, pressed .....                 | lb    | 75      |
| Dwarf Elder, pressed, lb.....lb         | 35            | Senega, powd. ....lb                  | 80    |         |
| Elecampane, pressed, lb. ....lb         | 25            | Silkweed, pressed .....               | lb    | 28      |
| Elecampane, powd .....                  | lb            | Skunk Cabbage, pressed .....          | lb    | 30      |
| Gelsemium, pressed, lb.....lb           | 25            | Skunk Cabbage, powd .....             | lb    | 35      |
| Gelsemium, powd .....                   | lb            | Snake, Canada, pressed.....lb         | 65    |         |
| Gentian .....                           | lb            | Snake, Virginia .....                 | lb    | 65      |
| Gentian, ground .....                   | lb            | Snake, Virginia, powd .....           | lb    | 70      |
| Gentian, powd .....                     | lb            | Spikenard, pressed .....              | lb    | 72      |
| Ginger, African. ....lb                 | 17            | Spikenard, powd .....                 | lb    | 30      |
| Ginger, African, powd .....             | lb            | Squills, white, sliced. ....lb        | 20    |         |
| Ginger, Jamaica, bleached. ....lb       | 27            | Squills, powd .....                   | lb    | 60      |
| Ginger, Jamaica, bleached, powd.....lb  | 30            | Stillingia, pressed .....             | lb    | 25      |
| Ginseng .....                           | lb 8 50-10 00 | Stillingia, powd .....                | lb    | 30      |
| Golden Seal .....                       | lb 2 70       | Stone, pressed .....                  | lb    | 25      |
| Golden Seal, powd .....                 | lb 2 70       | Sweet Flag, pressed .....             | lb    | 25      |
| Hellebore, black, pressed.....lb        | 25            | Turkey Corn .....                     | lb    | 28      |
| Hellebore, black, powd.....lb           | 25            | Unicorn, true, pressed .....          | lb    | 35      |
| Hellebore, white, pressed, lb.....lb    | 25            | Unicorn, true, powd .....             | lb    | 40      |
| Hellebore, white, powd.....lb           | 25            | Unicorn, false, pressed.....lb        | 40    |         |
| Indian Hemp, black, pressed, lb.....lb  | 35            | Unicorn, false, powd .....            | lb    | 45      |
| Indian Hemp, black, powd .....          | lb            | Valerian, English, bulk.....lb        | 35    |         |
| Indian Hemp, white, pressed .....       | lb            | Valerian, English, powd .....         | lb    | 35      |
| Indian Hemp, white, powd .....          | lb            | Valerian, German .....                | lb    | 30      |
| Ipecac, Rio, powd.....lb                | 2 50          | Valerian, German, powd .....          | lb    | 30      |
| Jalap .....                             | lb            | Yellow Dock .....                     | lb    | 25      |
| Jalap, powd .....                       | lb            | Yellow Dock, ground .....             | lb    | 30      |
| Kava Kava .....                         | lb            | Yellow Dock, powd .....               | lb    | 30      |
| Ladies' Slipper, pressed, lb.....lb     | 75            | Zedoary .....                         | lb    | 30      |
| Licorice, select .....                  | lb            | ROSIN, No. 1. ....lb                  | 6-8   |         |
| Licorice, pipestem .....                | lb            | Barrel. . . . .                       | 7 75  |         |
| Licorice, cut, Russian .....            | lb            | ROUGE, Jewelers' .....                | lb    | 50      |
| Licorice, powd .....                    | lb 16-20      | SACCHARIN .....                       | tin   | 35      |
| Mandrake, pressed, lb.....lb            | 30            | SAFFRON, American .....               | lb    | 45      |
| Mandrake, powd .....                    | lb            | Spanish . . . . .                     | oz    | 75      |
| Marshmallow, cut .....                  | lb            | Spanish . . . . .                     | lb    | 9 00    |
| Marshmallow, powd .....                 | lb            | SAL, Acetosella .....                 | lb    | 30      |
| Musk .....                              | lb            | Epsom, bbl 2c.....lb                  | 3-5   |         |
| Orris, Florentine .....                 | lb            | Glauber .....                         | lb    | 1 1/2-4 |
| Orris, Florentine, Fingers.....lb       | 1 25          | Nitre .....                           | lb    | 10-12   |
| Orris, Florentine, granulated.....lb    | 35            | Nitre, granulated. ....lb             | 10-12 |         |
| Orris, Florentine, powd.....lb          | 30            | Nitre, powd. ....lb                   | 10-12 |         |
| Pareira Brava, pressed .....            | lb            | Prunelle .....                        | lb    | 45      |
| Pink. . . . .                           | lb            | Rochelle. . . . .                     | lb    | 28-30   |
| Pink, powd. ....lb                      | 90            | Soda. . . . .                         | lb    | 3-5     |
| Pleurisy, pressed .....                 | lb            | Tartar. . . . .                       | lb    | 15      |
| Poke, pressed .....                     | lb            | SALICINE .....                        | oz    | 37      |
| Poke, powd .....                        | lb            | .....lb                               | 4 60  |         |
| Pond Lily, white, pressed .....         | lb            | SALIPYRINE .....                      | oz    | 1 00    |
| Pond Lily, white, powd .....            | lb            | SALOL, Mallinckrodt's.....oz          | 15    |         |
| Pond Lily, yellow, pressed .....        | lb            | Salol, Mallinckrodt's, cartons .....  | lb    | 1 17    |
| Pond Lily, yellow, powd .....           | lb            | SALOPHEN .....                        | oz    | 1 00    |
| Rhatany .....                           | lb            | SANTONIN, bulk M. C. W.....lb         | 5 34  |         |

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|                                                               |             |                                                    |             |
|---------------------------------------------------------------|-------------|----------------------------------------------------|-------------|
| 1-oz vials, M. C. W.....oz                                    | 42          | Maccaboy, 3 1/3-oz bots.....doz                    | 2 00        |
| SEED, Angelica .....lb                                        | 25          | Rappee .....lb                                     | 65          |
| Anise, Italian .....lb                                        | 18          | Rappee, 3 1/3-oz bots.....doz                      | 2 00        |
| Anise, Italian, powd.....lb                                   | 25          | Scotch, Lorillard's .....lb                        | 65          |
| Anise, Star .....lb                                           | 45          | Scotch, Lorillard's .....doz                       | 2 00        |
| Bird, mixed, bulk. ....lb                                     | 8           | Scotch, Garrett's Bladders.....lb                  | 55          |
| Bird, mixed, boxes.....doz                                    | 80          | SOAP, Castile, Conti's, white, box 15 1/4c less.lb | 18          |
| Bird, mixed, cases, 30 pks.....                               | 2 25        | Castile, mottled, box 8 1/2c; less.....lb          | 12          |
| Burdock .....lb                                               | 25          | Castile, powdered, white.....lb                    | 30-35       |
| Canary .....lb                                                | 9-10        | Green, German .....lb                              | 20          |
| Caraway, Dutch. ....lb                                        | 15          | Edyoux, (box 9c) .....lb                           | 12          |
| Caraway, powd. ....lb                                         | 17          | SODA, Ash. ....lb                                  | 2 1/2-5     |
| Cardamon, Malabar. ....lb                                     | 1 00        | Caustic, Sticks .....lb                            | 34          |
| Cardamon, Mangalor, bleached.....lb                           | 1 25        | Caustic, com., drums.....lb                        | 3-4         |
| Cardamon, powd. ....lb                                        | 1 00        | Caustic, com., 10-lb drums.....lb                  | 6 1/2-7 1/2 |
| Celery .....lb                                                | 25          | Caustic, purified, fused.....lb                    | 40          |
| Colchicum. . . . .lb                                          | 50          | Sal (carbonate) bbls., 1 1/4c.....lb               | 3           |
| Colchicum, powd. ....lb                                       | 55          | Soda Silicate, dry .....lb                         | 35          |
| Conium .....lb                                                | 25          | Soda Silicate, liquid .....lb                      | 20-25       |
| Coriander, German. ....lb                                     | 14          | SODIUM, 1-oz vials, M. C. W.....oz                 | 25          |
| Coriander, German, powd .....lb                               | 20          | Acetate, M. C. W., carton.....lb                   | 17          |
| Cumin .....lb                                                 | 18-20       | Arsenate, 1-oz vials.....oz                        | 9           |
| Dill .....lb                                                  | 25          | Arsenite, 1-oz vials, M. C. W.....oz               | 10          |
| Fennel. . . . .lb                                             | 18          | Benzoate, 1-oz vials, M. C. W.....oz               | 11          |
| Fennel, powd. ....lb                                          | 20          | Benzoate, 1-lb. bots. ....lb                       | 56          |
| Flax, recleaned. ....lb                                       | 5 1/2-6     | Benzoate, true fr. Gum Benzoin.....oz              | 29          |
| Flax, ground. ....lb                                          | 5 1/2-6     | Bicarbonate, C. P., powd., M. C. W.....lb          | 15          |
| Flax Oil Cake .....lb                                         | 2 1/2-3 1/2 | Bicarbonate, kegs, 3c.....lb                       | 4-5         |
| Foenugreek, powd .....lb                                      | 12          | Bisulphite, dry, pure .....lb                      | 27          |
| Hemp, recleaned .....lb                                       | 6 1/2-8     | Borate, neutral .....oz                            | 19          |
| Henbane .....lb                                               | 35          | Bromide, M. C. W.....lb                            | 38          |
| Larkspur. . . . .lb                                           | 55          | Cacodylate .....oz                                 | 84          |
| Lobelia.....lb                                                | 60          | Carbonate, pure cryst., 1-lb car., M. C. W.lb      | 11          |
| Lobelia, powd. ....lb                                         | 65          | Carbonate, pure gran., 1-lb car., M. C. W.lb       | 11          |
| Millet, American. ....lb                                      | 6-8         | Carbonate, dried, C. P., 1-lb car.....lb           | 27          |
| Mustard, black, Trieste .....lb                               | 10-12       | Cinnamate .....oz                                  | 59          |
| Mustard, white .....lb                                        | 10-10       | Citrate, M. C. W.....lb                            | 67          |
| Poppy Blue .....lb                                            | 16          | Glycerophosphate, 75% .....oz                      | 24          |
| Pumpkin .....lb                                               | 22          | Glycocholate. . . . .oz                            | 1 04        |
| Rape, California. ....lb                                      | 6-8         | Hypophosphite, purified .....lb                    | 1 14        |
| Quince .....lb                                                | 1 20        | Hypophosphite, 1-oz vials .....oz                  | 15          |
| Sabadilla .....lb                                             | 35          | Hyposulphite, 112-lb kegs. ....lb                  | 3           |
| Sabadilla, powd .....lb                                       | 30-35       | Hyposulphite, less .....lb                         | 5           |
| Stavesacre .....lb                                            | 40          | Iodide, 1-oz vials, M. C. W.....oz                 | 31          |
| Stavesacre, powd .....lb                                      | 45          | Iodide, M. C. W.....lb                             | 3 53        |
| Stramonium .....lb                                            | 25          | Nitrate, cryst., C. P.....lb                       | 29          |
| Stramonium, powd .....lb                                      | 30          | Nitrate, gran., pure, 1-lb cartons.....lb          | 18          |
| Sunflower .....lb                                             | 10-12       | Phosphate, pure, recryst., bulk.....lb             | 12          |
| Watermelon .....lb                                            | 25          | Phosphate, gran., pure, M. C. W.....lb             | 13          |
| Worm, American .....lb                                        | 25          | Phosphate, dried, powd.....lb                      | 24          |
| Worm, American, powd .....lb                                  | 25          | Salicylate, 1-lb box, P. W. R.....lb               | 50          |
| Worm, Levant .....lb                                          | 35          | Salicylate, 1-lb box, M. C. W.....lb               | 50          |
| Worm, Levant, powd .....lb                                    | 40          | Santoninate .....oz                                | 89          |
| SEIDLITZ MIXTURE .....lb                                      | 28-30       | Succinate .....oz                                  | 45          |
| SILVER, Bromide, 1-oz. vials, M. C. W....oz                   | 1 19        | Sulphate, Glauber Salts.....lb                     | 3-5         |
| Chloride, 1-oz vials, M. C. W.....oz                          | 84          | Sulphate, Glauber Salts, bbl.....lb                | 1 1/2       |
| Cyanide, 1-oz vials, M. C. W.....oz                           | 1 04        | Sulphate, dried .....lb                            | 18-20       |
| Iodide, 1-oz vials, M. C. W.....oz                            | 1 04        | Sulphite, crystals .....lb                         | 10          |
| Lactate .....oz                                               | 1 04        | Sulphite, granulated .....lb                       | 18          |
| Nitrate, cryst., 1-oz vials, M. C. W.....oz                   | 49          | Sulphite, dry .....lb                              | 22          |
| Nitrate, cones, 1-oz vials.....oz                             | 64          | Tartrate .....lb                                   | 64          |
| Nitrate, fused (Lunar caustic), 1-oz vials,<br>M. C. W.....oz | 52          | SOLUTIONS, Donovan's .....lb                       | 34          |
| Nitrate, cryst., 1-oz vials, P. W. R.....oz                   | 48          | Fowler's .....lb                                   | 30          |
| Nitrate, cryst., 1-lb vials, P. W. R.....lb                   | 7 42        | Goulard's .....lb                                  | 35          |
| Nitrate, fused, No. 2, 1-oz vials.....lb                      | 41          | Nitrate, Iron .....lb                              | 50          |
| SNUFF, Garrett's, 1-oz tins.....doz                           | 60          | Mercury, Nitrate .....oz                           | 20          |
| Garrett's, 1 1/3-oz tins. ....doz                             | 1 10        | Monsel's .....lb                                   | 50          |
| Garrett's, 3 1/3-oz tins.....doz                              | 1 75        | Tin, Chloride .....lb                              | 35          |
| Garrett's, 6-oz bots.....doz                                  | 3 00        | SOMATOSE, Biscuit, 8-oz boxes.....doz              | 4 00        |
|                                                               |             | Somatose, Ferro, 2-oz tins.....doz                 | 10 00       |

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|                                            |      |       |                                       |     |       |
|--------------------------------------------|------|-------|---------------------------------------|-----|-------|
| Somatose, 2-oz tins .....                  | doz  | 8 50  | Sicily, ground. ....                  | lb  | 5     |
| Somatose, 1¼-lb tins.....                  | lb   | 5 25  | Strips .....                          | lb  | 15    |
| Somatose, 1½-lb tins.....                  | lb   | 5 00  | Washed .....                          | lb  | 15    |
| SOZOIODOL, Mercury .....                   | oz   | 1 15  | SUMAC. ....                           | lb  | 10    |
| Potassium .....                            | oz   | 75    | SYRUP, Ginger, U. S. P.....           | lb  | 65    |
| Sodium .....                               | oz   | 80    | Hydriodic Acid .....                  | lb  | 70    |
| Zinc .....                                 | oz   | 1 10  | Iron Iodide .....                     | lb  | 65    |
| SPARTEINE, Sulphate, ⅛s.....               | oz   | 1 08  | Ipecac .....                          | lb  | 60    |
| Sulphate, 15-gr. vials.....                | ea   | 12    | Lactucarium .....                     | lb  | 1 00  |
| SPERMACEI, in cakes.....                   | lb   | 40    | Orange Peel .....                     | lb  | 65    |
| SPIRIT, Ammonia .....                      | lb   | 75    | Rhubarb .....                         | lb  | 60    |
| Ammonia, aromatic .....                    | lb   | 85    | Rhubarb, Aromatic .....               | lb  | 65    |
| Camphor .....                              | lb   | 65    | Rhubarb and Potash.....               | lb  | 65    |
| Chloroform, U. S. P.....                   | lb   | 75    | Sarsaparilla .....                    | lb  | 65    |
| Lavender .....                             | lb   | 60    | Sarsaparilla, comp.....               | lb  | 65    |
| Nitre, U. S. P., 1-lb bots.....            | lb   | 60    | Senna .....                           | lb  | 65    |
| Nitre, U. S. P., 4-lb bots.....            | lb   | 55    | Senega, U. S. P.....                  | lb  | 65    |
| Nutmeg. . .                                | lb   | 75    | Simple .....                          | lb  | 35    |
| Pimento. . .                               | lb   | 65    | Squill .....                          | lb  | 60    |
| Rosemary. . .                              | lb   | 65    | Squill, comp.....                     | lb  | 60    |
| STEARIN .....                              | lb   | 22    | Stillingia, comp.....                 | lb  | 60    |
| STONE, Pumice, select.....                 | lb   | 10    | Tolu .....                            | lb  | 60    |
| Pumice, select, powd.....                  | lb   | 8-10  | Wild Cherry .....                     | lb  | 60    |
| Rotten .....                               | lb   | 12-15 | Yerba Santa comp.....                 | lb  | 65    |
| Rotten, powd .....                         | lb   | 10    | TALCUM, powdered .....                | lb  | 6-8   |
| Soap, cut .....                            | lb   | 18    | Purified .....                        | lb  | 20-25 |
| Soap, powd .....                           | lb   | 8     | TAMARINDS, pound bottles.....         | lb  | 25    |
| STRONTIUM, Bromide, cryst., M. C. W..      | lb   | 64-84 | Keg .....                             | ea  | 3 25  |
| Carbonate, M. C. W.....                    | lb   | 34    | Pulp .....                            | lb  | 50    |
| Hypophosphite, M. C. W.....                | oz   | 29    | TANNALBIN. . .                        | oz  | 85    |
| Iodide, 1-oz vials, M. C. W.....           | oz   | 28    | TANNIN, 1-lb cartons, incl., Reg..... | lb  | 85-90 |
| Lactate .....                              | oz   | 16    | Tannin, U. S. P. ....                 | lb  | 1 15  |
| Muriate, M. C. W.....                      | lb   | 32    | TANNIGEN .....                        | oz  | 75    |
| Nitrate, pure, dried .....                 | lb   | 59    | TANNOFORM .....                       | oz  | 22    |
| Salicylate, M. C. W.....                   | lb   | 83    | TANNOPINE .....                       | oz  | 75    |
| Sulphate, M. C. W.....                     | lb   | 69    | Veterinary .....                      | oz  | 25    |
| STYPTICIN .....                            | oz   | 6 50  | TAR, Barbadoes .....                  | lb  | 25    |
| STRYCHNINE, Acetate, ⅛-oz vials, M.C.W.oz  | 1 65 |       | Coal .....                            | gal | 25    |
| Arsenate, ⅛-oz vials, M. C. W.....         | 1 65 |       | Pine, bulk .....                      | gal | 40    |
| Bromide, ⅛-oz vials, M. C. W.....          | 1 65 |       | Pine, ½-lb cans.....                  | doz | 75    |
| Citrate, ⅛-oz vials, M. C. W.....          | 1 65 |       | Pine, 1-lb cans.....                  | doz | 90    |
| Crystals, ⅛-oz vials, M. C. W.....         | 1 20 |       | Pine, 2-lb cans.....                  | doz | 1 50  |
| Hypophosphite, ⅛-oz vials, M. C. W.....    | 1 90 |       | Pine, gal cans.....                   | doz | 6 00  |
| Muriate, ⅛-oz vials, M. C. W.....          | 1 65 |       | TARTAR EMETIC, M. C. W.....           | lb  | 50    |
| Nitrate, ⅛-oz vials, M. C. W.....          | 1 65 |       | TEREBENE, 1-lb bottles. ....          | lb  | 79    |
| Phosphate, ⅛-oz vials, M. C. W.....        | 1 70 |       | .....                                 | oz  | 14    |
| Sulphate, ⅛-oz vials, M. C. W.....         | 1 20 |       | TERPIN HYDRATE, cryst. ....           | oz  | 8     |
| Sulphate, 1-oz vials, M. C. W.....         | 1 00 |       | Pounds .....                          | lb  | 50    |
| Sulphate, 1-oz vials, P. W. R.....         | 1 00 |       | TERPINOL, Liquid .....                | oz  | 47    |
| Crystals, 1-oz vials, N. Y. Q.....         | 80   |       | THEOBROMINE, Alkaloid .....           | oz  | 90    |
| Crystals, in bulk, N. Y. Q.....            | 75   |       | And Sodium Salicylate .....           | oz  | 60    |
| Powdered, in bulk, N. Y. Q.....            | 70   |       | THIOL, dry .....                      | oz  | 1 00  |
| Powdered, ⅛-oz vials, N. Y. Q.....         | 1 00 |       | Liquid. . .                           | oz  | 40    |
| Powdered, 1-oz vials, N. Y. Q.....         | 75   |       | THYMOL, 1-oz vials.....               | oz  | 27    |
| STYRAX, liquid .....                       | lb   | 40-60 | Pounds .....                          | lb  | 2 94  |
| SUGAR, burnt .....                         | lb   | 25    | THYROIDIN .....                       | oz  | 1 30  |
| Grape. . .                                 | lb   | 25    | TIN, Chloride .....                   | lb  | 53    |
| Milk, crystals .....                       | lb   | 30    | Metallic, feathered .....             | lb  | 1 00  |
| Milk, powd., bulk .....                    | lb   | 19    | Muriate, solution .....               | lb  | 35    |
| Milk, powd., M.C.W., 1-lb cartons.....     | lb   | 21    | Oxide, white, pure .....              | lb  | 99    |
| SULFONAL, 1-oz vials.....                  | oz   | 1 35  | TINCTURE, Aconite Leaves .....        | lb  | 65    |
| SULPHON-ETHYL-METHANE .....                | oz   | 58    | Aconite Root .....                    | lb  | 75    |
| SULPHON-METHANE .....                      | oz   | 48    | Aconite Root, Flemings .....          | lb  | 90    |
| SULPHUR, California, ground, 110-lb bags.. | lb   | 2     | Aloes .....                           | lb  | 65    |
| Flowers .....                              | lb   | 5     | Aloes and Myrrh .....                 | lb  | 65    |
| Flowers, in bags .....                     | lb   | 2¾-3  | Arnica .....                          | lb  | 65    |
| Iodide .....                               | oz   | 38    | Asafetida .....                       | lb  | 65    |
| Lac., precip., U. S. P.....                | lb   | 16    | Belladonna .....                      | lb  | 65    |
| Roll, bbl.....                             | lb   | 2¾-5  |                                       |     |       |

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|                              |    |      |                                      |     |         |
|------------------------------|----|------|--------------------------------------|-----|---------|
| Benzoin .....                | lb | 75   | TRIONAL .....                        | oz  | 1 50    |
| Benzoin, comp.....           | lb | 75   | TRIPOLI, bulk .....                  | lb  | 8-12    |
| Blood Root .....             | lb | 65   | TURPENTINE .....                     | gal | 80      |
| Buchu .....                  | lb | 65   | In case .....                        | gal | 70      |
| Cantharides .....            | lb | 75   | Chian .....                          | oz  | 45      |
| Capsicum .....               | lb | 65   | Venice .....                         | lb  | 35      |
| Cardamom .....               | lb | 75   | URANIUM, Acetate, 1-oz vials .....   | oz  | 59      |
| Cardamom, comp.....          | lb | 75   | Chloride, 1-oz vials .....           | oz  | 47      |
| Catechu, comp.....           | lb | 75   | Nitrate, 1-oz vials .....            | oz  | 45      |
| Cinchona, comp.....          | lb | 75   | Sulphate, 1-oz vials .....           | oz  | 47      |
| Cinnamon .....               | lb | 65   | UROTROPIN .....                      | oz  | 60      |
| Colchicum Root .....         | lb | 75   | Tablets, 20 in box.....              | box | 25      |
| Colchicum Seed .....         | lb | 75   | UNGUENTUM CREDE, 1/2-oz jars.....    | oz  | 90      |
| Columbo .....                | lb | 60   | URETHANE .....                       | oz  | 54      |
| Conium .....                 | lb | 65   | VANILLIN, 1-oz vials .....           | oz  | 60      |
| Cubebs .....                 | lb | 65   | VERATRINE, pure, 1/8-oz vials.....   | oz  | 2 40    |
| Digitalis .....              | lb | 65   | VERONAL, powd.....                   | oz  | 1 60    |
| Ergot .....                  | lb | 75   | Tablets, 10 S.....                   | ea  | 30      |
| Ergot, ethereal .....        | lb | 80   | Tablets, 100s .....                  | ea  | 2 25    |
| Galls .....                  | lb | 60   | VERDIGRIS .....                      | lb  | 40      |
| Gelsemium .....              | lb | 75   | Powdered .....                       | lb  | 45      |
| Gentian .....                | lb | 60   | WATER, Cherry, Laurel.....           | pt  | 50      |
| Gentian, comp.....           | lb | 65   | Chlorine .....                       | lb  | 40      |
| Ginger .....                 | lb | 65   | Distilled .....                      | gal | 8-10    |
| Guaiac .....                 | lb | 75   | Elder Flower .....                   | lb  | 50      |
| Guaiac, ammoniated .....     | lb | 75   | Orange Flower, triple.....           | lb  | 35      |
| Guaiac, Dewees' .....        | lb | 75   | Orange Flower .....                  | gal | 2 00    |
| Hyoscyamus .....             | lb | 65   | Orange Flower, Chiris, small.....    | doz | 2 00    |
| Iodine. . . . .              | lb | 1 40 | Orange Flower, Chiris, large.....    | doz | 3 75    |
| Iodine, colorless. . . . .   | lb | 1 40 | Rose, triple .....                   | lb  | 40      |
| Iodine, comp. . . . .        | lb | 1 40 | Rose .....                           | gal | 2 00    |
| Iodine, Churchill's. . . . . | lb | 1 75 | Rose, Chiris, 6 3/4-gal coppers..... | gal | 1 75    |
| Ipecac .....                 | lb | 80   | Rose, Chiris, small.....             | doz | 2 00    |
| Iron Acetate .....           | lb | 65   | Rose, Chiris, large.....             | doz | 4 00    |
| Iron Chloride .....          | lb | 50   | WAX, Bayberry .....                  | lb  | 60      |
| Iron Citro-Chloride .....    | lb | 65   | Bees, yellow, refined.....           | lb  | 35-40   |
| Jalap .....                  | lb | 65   | Bees, yellow, oz. . . . .            | lb  | 45      |
| Kino .....                   | lb | 75   | Bees, white, extra .....             | lb  | 55      |
| Lobelia .....                | lb | 60   | Bees, white, No. 1. . . . .          | lb  | 55      |
| Lobelia, ethereal .....      | lb | 65   | Fruit, can, red.....                 | lb  | 8       |
| Myrrh .....                  | lb | 75   | Fruit, can, white .....              | lb  | 8       |
| Myrrh and Capsicum.....      | lb | 75   | Japan .....                          | lb  | 15-18   |
| Nux Vomica .....             | lb | 65   | WAX, FLOOR .....                     | lb  | 25-38   |
| Opium .....                  | lb | 1 25 | Johnson's, 1-lb cartons.....         | doz | 4 00    |
| Opium, camphorated .....     | lb | 60   | Johnson's, 1/2-lb cartons .....      | doz | 2 40    |
| Opium, deodorized .....      | lb | 1 30 | Johnson's, 1/4-lb cartons .....      | doz | 1 50    |
| Orange Peel .....            | lb | 65   | Bowdlear's, 1-lb cartons .....       | doz | 4 00    |
| Quassia .....                | lb | 60   | WHITING, Gilders' .....              | lb  | 3       |
| Rhatany .....                | lb | 60   | Spanish .....                        | lb  | 2 1/2   |
| Red Saunders .....           | lb | 65   | WINE, Antimony .....                 | lb  | 65      |
| Rhubarb .....                | lb | 65   | Aromatic .....                       | lb  | 65      |
| Rhubarb, Aqueous .....       | lb | 60   | Colchicum Root .....                 | lb  | 75      |
| Rhubarb, Aromatic .....      | lb | 70   | Colchicum Seed .....                 | lb  | 65      |
| Rhubarb, comp.....           | lb | 65   | Ergot .....                          | lb  | 1 25    |
| Rhubarb, Sweet .....         | lb | 65   | Ipecac .....                         | lb  | 1 25    |
| Rhubarb and Aloes.....       | lb | 65   | WOOD, Brazil, ground.....            | lb  | 10      |
| Rhubarb and Senna.....       | lb | 65   | Camwood .....                        | lb  | 80      |
| Senna .....                  | lb | 65   | Fustic, cut .....                    | lb  | 3 1/2-5 |
| Senna, comp.....             | lb | 65   | Fustic, ground .....                 | lb  | 6       |
| Serpentaria .....            | lb | 65   | Guaiac, rasped .....                 | lb  | 10      |
| Stramonium Leaves .....      | lb | 65   | Hypernic. . . . .                    | lb  | 8-10    |
| Stramonium Seed .....        | lb | 65   | Logwood, chip. . . . .               | lb  | 8-10    |
| Strophanthus .....           | lb | 1 25 | Logwood, ground. . . . .             | lb  | 8-10    |
| Tolu .....                   | lb | 75   | Nic. . . . .                         | lb  | 8-10    |
| Valerian .....               | lb | 65   | Quassia, chip. . . . .               | lb  | 15      |
| Valerian, ammoniated .....   | lb | 85   | Quassia, ground. . . . .             | lb  | 18      |
| Veratrum Viride .....        | lb | 65   | Quassia, powdered. . . . .           | lb  | 18      |
| Warburg's .....              | lb | 1 75 | Red Sanders, ground. . . . .         | lb  | 12      |
| TRIKRESOL, S. & G.....       | lb | 60   | Red, cut. . . . .                    | lb  | 10      |
| TRIMETHYLAMINE .....         | oz | 55   |                                      |     |         |

\*Articles quoted in this Journal as M. C. W. are the products of the Mallinckrodt Chemical Works.



|                                            |    |      |    |                                           |       |      |
|--------------------------------------------|----|------|----|-------------------------------------------|-------|------|
| XANTHOXYLIN, Keith's .....                 | oz | 1    | 13 | Apollinaris, 50 qt bots in case.....      | 8 50  | 2 25 |
| XYLOL .....                                | lb | 70   |    | Apollinaris, pints. ....                  | 12 00 | 1 60 |
| ZINC, Acetate, 1-lb bottles, M. C. W.....  | lb | 43   |    | Buffalo Lithia, 12 ½-gal. bots in case..  | 5 75  | 6 00 |
| Benzoate .....                             | oz | 24   |    | Bartlett, 50 qt. bots. in case.....       | 8 00  | 2 25 |
| Benzoate, 1-oz vials, M. C. W.....         | oz | 24   |    | Bethesda, 50 qt. bots. in case.....       | 7 50  | 2 25 |
| Carbolate, 1-oz vials, M. C. W.....        | oz | 24   |    | Bethesda, 12 ½-gal. bots. in case.....    | 5 50  | .... |
| Carbonate, precipitate, 1-lb cartons.....  | lb | 25   |    | Bythia Water .....                        | 10 50 | 2 65 |
| Chloride, fused, 1-oz vials .....          | oz | 13   |    | Carlsbad, Sprudel, 30 qt. bots. in case.. | 11 00 | 4 25 |
| Chloride, granulated .....                 | lb | 33   |    | Carlsbad, Muhlbrun, 30 qt. bots. in case  | 11 00 | 4 25 |
| Cyanide, 1-oz vials, M. C. W.....          | oz | 21   |    | Congress (Saratoga), 48 bots. in case..   | 8 00  | 2 50 |
| Hypophosphite, 1-oz vials .....            | oz | 29   |    | Cooks .....                               | ....  | 2 00 |
| Iodide, 1-oz vials, M. C. W.....           | oz | 35   |    | Franz Joseph, 50 bots. in case.....       | 11 00 | 3 00 |
| Metallic, pure, feathered.....             | lb | 27   |    | Garrod Spa Lithia, pints .....            | 6 00  | 1 75 |
| Oxide, English, Hubbuck's. ....            | lb | 50   |    | Garrod Spa, Lithia, ½-gal.....            | ....  | 5 00 |
| Oxide, pure, M.C.W. ....                   | lb | 30   |    | Hathorn, 48 pt. bots. in case.....        | 8 00  | 2 50 |
| Permanganate .....                         | oz | 52   |    | Hunyadi Janos (in case), 50 qt. bots..    | 11 00 | 3 00 |
| Phosphate, M. C. W.....                    | oz | 10   |    | Hunyadi Matyas, 50 qt. bots. in case..    | 9 00  | 2 50 |
| Phosphide .....                            | oz | 23   |    | Pluto .....                               | ....  | 3 25 |
| Sulphate, cryst.....                       | lb | 8-10 |    | Poland, ½ gals. ....                      | ....  | 5 00 |
| Sulphate, cryst., chemically pure, M.C.W.. | lb | 18   |    | Rackoczy Kissengen .....                  | ....  | 5 00 |
| Sulphide, 1-oz vials, M. C. W.....         | oz | 16   |    | Red Raven Splits. ....                    | 5 00  | 1 35 |
| Sulphocarbonate, M. C. W.....              | lb | 59   |    | Rubinat Condal, 50 pt. bots. in case..    | 12 00 | 3 25 |
| Sulphocarbonate, 1-oz vials, M. C. W....   | oz | 11   |    | Veronica .....                            | ....  | 5 00 |
| Sulphate, H. P. ....                       | lb | 15   |    | Vichy Water Celestine .....               | 10 25 | 3 00 |
| Sulphate, dried, H. P.....                 | lb | 25   |    | Risk of breakage is assumed by buyer.     |       |      |
| Sulphocarbonate .....                      | oz | 10   |    | Villacabras Water, qts., 50 bots. in case | 17 50 | 4 50 |
|                                            |    |      |    | Witter, 36 bots in case.....              | 12 00 | 4 50 |
|                                            |    |      |    | White Rock Splits. ....                   | 9 90  | 1 20 |
|                                            |    |      |    | White Rock, pints .....                   | 11 50 | 1 50 |
|                                            |    |      |    | White Rock, quarts. ....                  | 8 85  | 2 25 |

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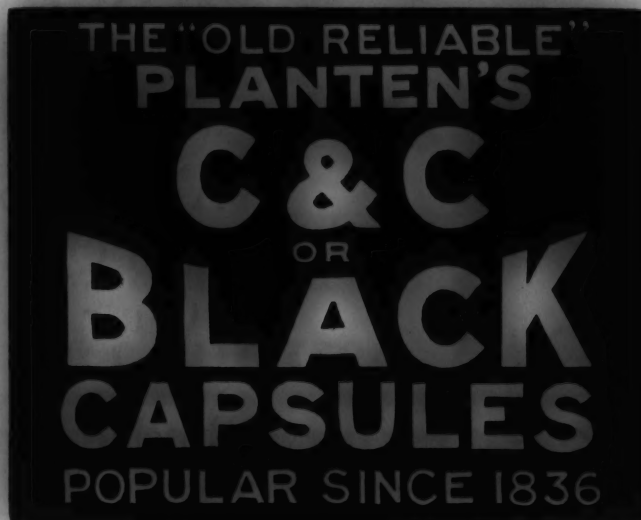
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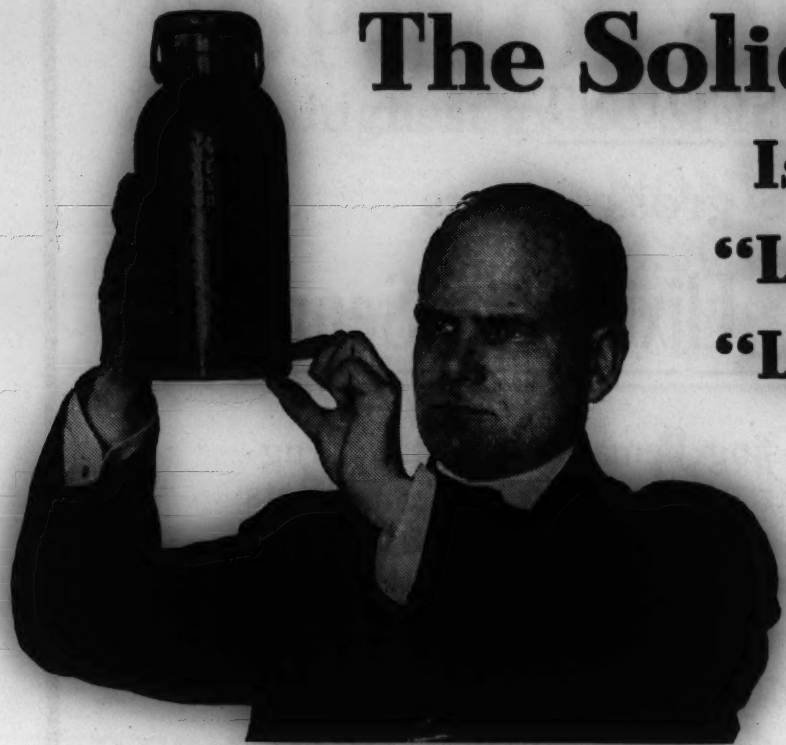
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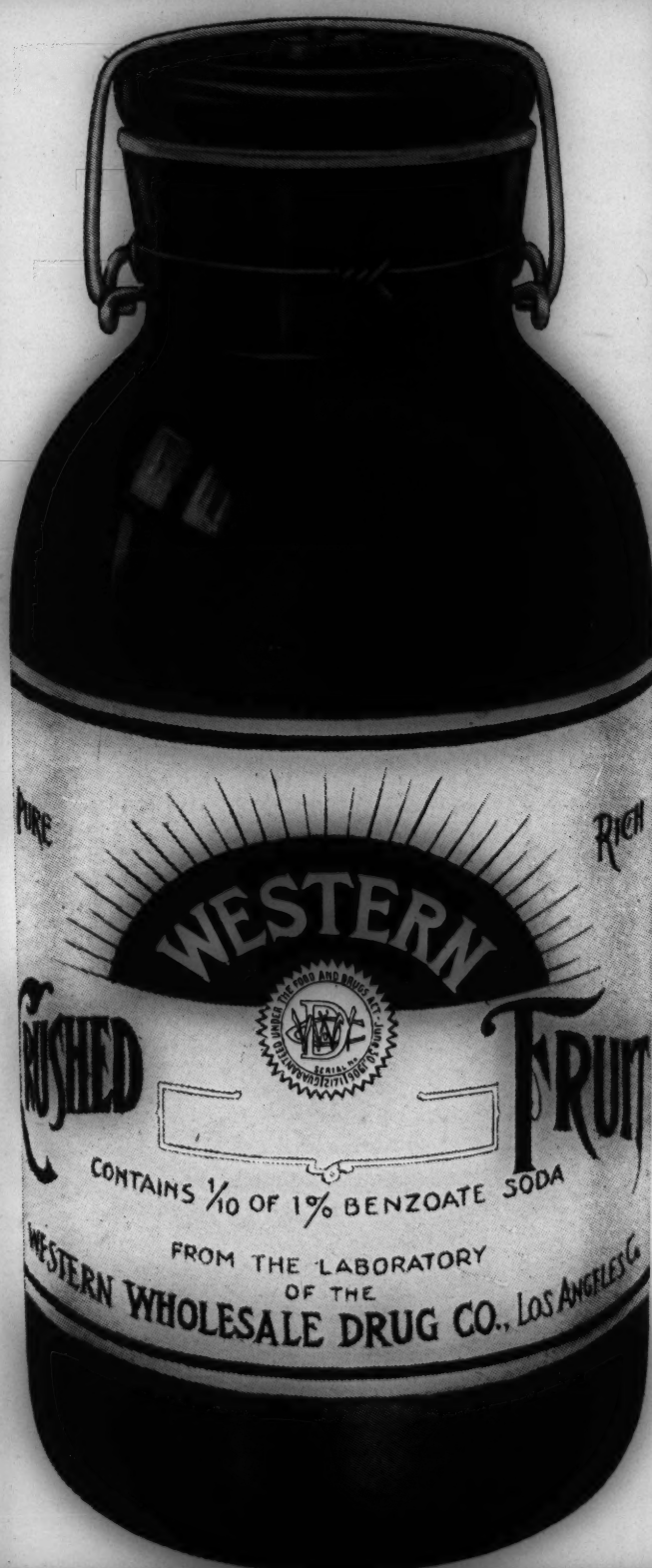


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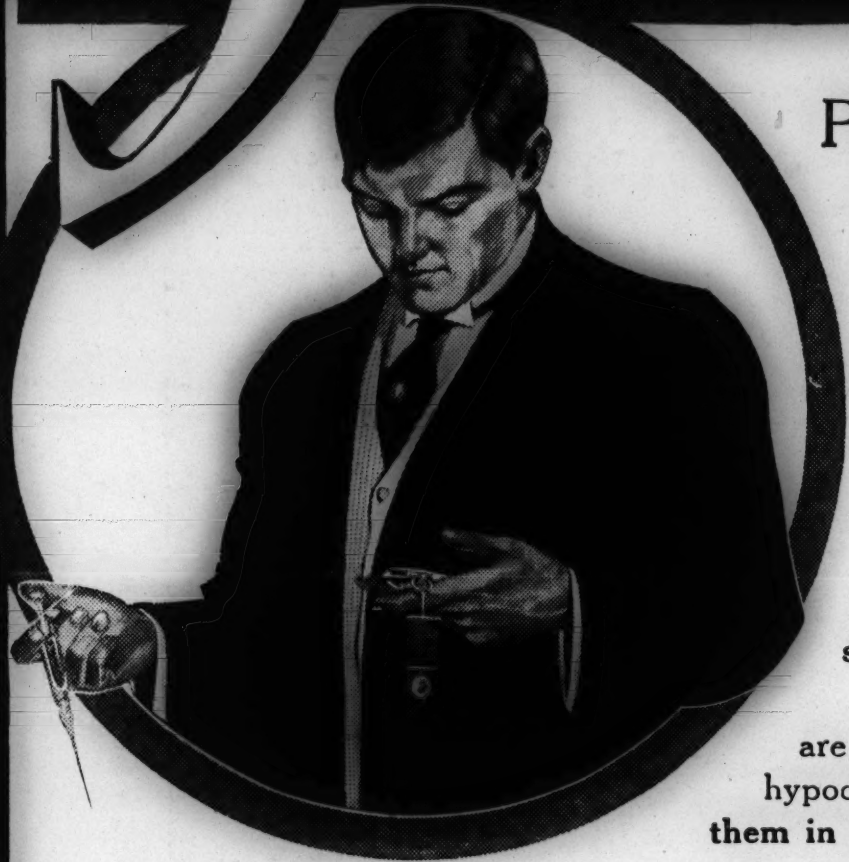
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